Registration No. 333-

Confidential Draft Submission Amendment No. 3 submitted to the Securities and Exchange Commission on August 20, 2014.
This draft registration statement has not been filed publicly with the Securities and Exchange Commission and all information contained herein remains confidential.

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM S-1

REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

XENON PHARMACEUTICALS INC.

(Exact name of registrant as specified in its charter)

Canada	2834	98-0661854
(State or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification Number)

200 – 3650 Gilmore Way
Burnaby, British Columbia V5G 4W8
Canada
(604) 484-3300
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Simon N. Pimstone
President and Chief Executive Officer
Xenon Pharmaceuticals Inc.
200 – 3650 Gilmore Way
Burnaby, British Columbia V5G 4W8
Canada
(604) 484-3300
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Jeffrey D. Saper Steven V. Bernard Bryan D. King Wilson Sonsini Goodrich & Rosati, P.C. 650 Page Mill Road Palo Alto, California 94304 (650) 493-9300	Ian C. Mortimer Karen G. Corraini Xenon Pharmaceuticals Inc. 200 – 3650 Gilmore Way Burnaby, British Columbia V5G 4W8 Canada (604) 484-3300	Charles S. Kim Andrew S. Williamson David G. Peinsipp Cooley LLP 4401 Eastgate Mall San Diego, California 92121 (858) 550-6000

Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this Registration Statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933 check the following box: ☐

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☐ Accelerated filer ☐ Non-accelerated filer (Do not check if a smaller reporting company) ☒ Smaller reporting company ☐

CALCULATION OF REGISTRATION FEE

TITLE OF EACH CLASS OF SECURITIES TO BE REGISTERED	PROPOSED MAXIMUM AGGREGATE OFFERING PRICE (1)	AMOUNT OF REGISTRATION FEE
Common Shares, no par value per share	$	$

(1) Estimated solely for the purpose of calculating the amount of the registration fee in accordance with Rule 457(o) under the Securities Act of 1933, as amended. Includes shares that the underwriters have the option to purchase.

The registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment that specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

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The information in this preliminary prospectus is not complete and may be changed. These securities may not be sold until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell these securities nor does it seek an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED , 2014

PRELIMINARY PROSPECTUS

Shares

XENON

Xenon Pharmaceuticals Inc.

Common Shares

We are offering of our common shares. This is our initial public offering and no public market currently exists for our common shares. We expect the initial public offering price to be between $ and $ per share.

We intend to apply to list our common shares on The NASDAQ Global Market under the symbol "XENE". We are an "emerging growth company" as defined by the Jumpstart Our Business Startups Act of 2012 and, as such, we have elected to comply with certain reduced public company reporting requirements for this prospectus and future filings.

Investing in our common shares involves a high degree of risk. See "Risk Factors" beginning on page 13 of this prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

	PER SHARE	TOTAL
Initial Public Offering Price	$	$
Underwriting Discounts and Commissions[1]	$	$
Proceeds, before expenses, to us	$	$

(1) The underwriters will also be reimbursed for certain expenses incurred in this offering. See "Underwriting" for details.

Delivery of the common shares purchased in this offering is expected to be made on or about , 2014. We have granted the underwriters an option for a period of 30 days to purchase up to additional common shares. If the underwriters exercise the option in full, the total underwriting discounts and commissions will be $ and the total proceeds to us, before expenses, will be $.

Joint Book-Running Managers

Jefferies **Cowen and Company**

Co-Managers

Wells Fargo Securities **RBC Capital Markets**

Prospectus dated , 2014

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We and the underwriters have not authorized anyone to provide any information other than that contained in this prospectus or in any free writing prospectus prepared by or on behalf of us or to which we have referred you. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. We and the underwriters are not making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus is accurate only as of the date on the front cover of this prospectus. Our business, financial condition, results of operations and prospects may have changed since that date.

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Until   , 2014, all dealers that effect transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to the dealers' obligation to deliver a prospectus when acting as underwriters and with respect to their unsold allotments or subscriptions.

In this prospectus, unless otherwise specified or the context otherwise requires, all dollar amounts are expressed in U.S. dollars.

As of June 30, 2014, the exchange rate for the conversion of Canadian dollars into U.S. dollars was 0.9372, based on the Bank of Canada's closing rate. Except as otherwise noted, all amounts referred to in this prospectus as "$, as converted" shall mean the U.S. dollar amount applying the conversion rate from Canadian dollars as of June 30, 2014.

PROSPECTUS SUMMARY

This summary highlights selected information contained elsewhere in this prospectus and is qualified in its entirety by the more detailed information and financial statements included elsewhere in this prospectus. It does not contain all of the information that may be important to you and your investment decision. You should carefully read this entire prospectus, including the matters set forth under "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our financial statements and related notes.

Unless the context requires otherwise, in this prospectus the terms "Xenon," "we," "us," "our" and "our company" refer to Xenon Pharmaceuticals Inc.

Xenon Pharmaceuticals Inc.

Overview

We are a clinical-stage biopharmaceutical company discovering and developing a pipeline of differentiated therapeutics for orphan indications that we intend to commercialize on our own, and for larger market indications that we intend to partner with global pharmaceutical companies. We have built a core enabling discovery platform for the discovery of validated drug targets by studying rare human diseases with extreme traits, including diseases caused by mutations in ion channels, known as channelopathies. We have an integrated platform that includes in-house capabilities for human genetics, small molecule drug discovery and pre-clinical and clinical development.

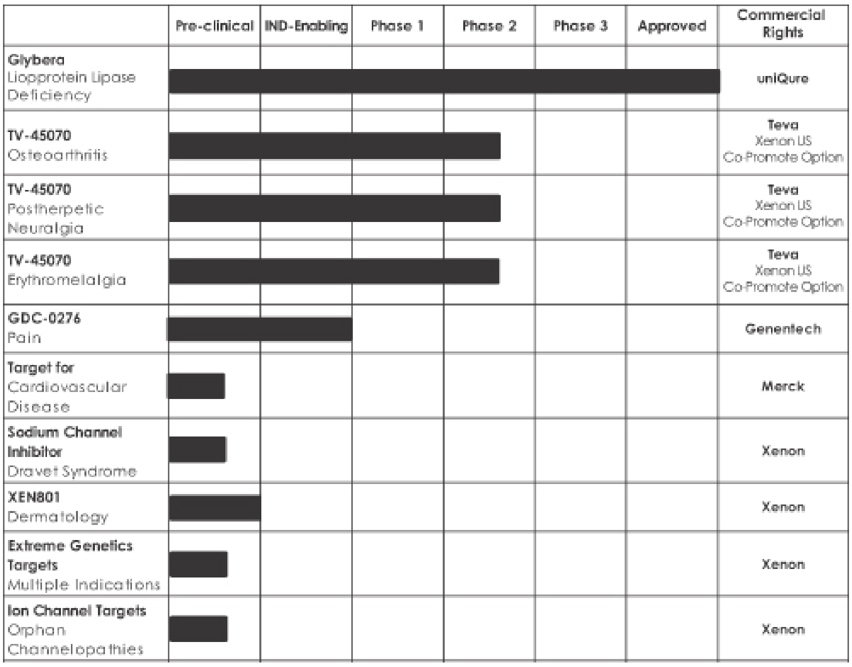
Our business was founded on our proprietary discovery platform, which we refer to as Extreme Genetics. Extreme Genetics involves the study of families where individuals exhibit inherited severe traits, or phenotypes. By identifying and characterizing single-gene defects responsible for these phenotypes, we gain insights into human disease biology to better select targets for therapeutic intervention. Our Extreme Genetics discovery platform has yielded the first approved gene therapy product in the European Union, or the EU, a broad development pipeline and multiple pharmaceutical partnerships.

Our pharmaceutical partners include Teva Pharmaceutical Industries Ltd., or Teva, Genentech, Inc., or Genentech, and Merck & Co., Inc., or Merck, (through its affiliate, Essex Chemie AG). Our pharmaceutical collaborations have generated in aggregate over $140.0 million in non-equity funding to date with the potential to provide us with over $1.0 billion in future milestone payments, as well as royalties and co-promotion income on product sales.

Our most advanced product candidate is TV-45070 (formerly XEN402), which we have partnered with Teva (through its subsidiary, Ivax International GmbH). Teva is currently conducting a 300-patient, randomized Phase 2b clinical trial of TV-45070 in osteoarthritis, or OA, of the knee and is currently planning additional development of TV-45070 in neuropathic pain indications. A second product candidate, GDC-0276, is being developed in collaboration with Genentech, for the treatment of pain. In August 2014, Genentech received approval from Health Canada to initiate a Phase 1 clinical trial for GDC-0276.

We have coupled our Extreme Genetics discovery platform with our integrated drug discovery capabilities, including significant ion channel expertise, to build our product pipeline. Our pipeline is balanced with both proprietary assets for orphan indications that we believe we can develop and commercialize independently and partnered assets in larger therapeutic markets that require significant commercial capabilities. We have implemented our strategic alliance model to establish well-structured partnerships that have front-loaded our product pipeline with near-to-mid-term market opportunities, and that have provided significant non-equity funding to date as well as substantial potential future milestone payments. Since inception, we believe that we have operated in a capital-efficient manner, and, as of June 30, 2014, we have cash, cash equivalents and marketable securities of $44.7 million. Since our last equity financing in 2006, we have funded our operations and expanded our platform, product pipeline and infrastructure through a combined strategy, including deploying our own resources and establishing our partnerships. We focus on execution of our corporate goals and partnering obligations, and, as a result, we believe we are well-positioned for potential value-creating inflection points in the near-term in both our partnered and proprietary programs, including the potential receipt of up to $40.5 million in milestone payments under our existing collaboration agreements, over the next 24 months, which includes an $8.0 million milestone payment earned from Genentech for the approval of the GDC-0276 Clinical Trial Application, or CTA, from Health Canada in August 2014.

The following chart summarizes our current product pipeline, including partnered and proprietary Xenon programs:



Our Programs

Approved Product

Glybera: Glybera is the first and currently the only gene therapy product to receive commercial approval in the EU. Glybera, developed by our licensee uniQure Biopharma B.V., or uniQure, is specifically indicated for the treatment of a subset of adult patients diagnosed with the orphan lipid disorder lipoprotein lipase deficiency, or LPLD, confirmed by genetic testing and suffering from severe or multiple pancreatitis attacks, despite dietary fat restrictions. LPLD is a severe metabolic disease of inadequate lipid metabolism, resulting in pancreatitis and, in some cases, death. Together with collaborators from the University of British Columbia, or UBC, we demonstrated that humans with a single gene variant of the lipoprotein lipase, or LPL, gene called LPL^{S447X}, resulted in increased LPL enzyme activity leading to reduced triglyceride levels. Under our sublicense and research agreement with uniQure, we collaborated with uniQure and UBC on preclinical activities, and thereafter uniQure developed an LPL gene therapy product, Glybera, which contains the LPL^{S447X} variant. We believe that the introduction of the therapeutic LPL^{S447X} gene through administration of Glybera provides a clinical benefit for a subset of LPLD patients.

Glybera is the first product whose active ingredient was derived from our platform to receive commercial approval. The goal of Glybera therapy is to treat LPLD in order to achieve sustained improvement of clearance of triglyceride-rich lipid particles known as chylomicrons, and to significantly reduce the risk of pancreatitis attacks in patients suffering from multiple recurrent pancreatitis and abdominal pain events. Glybera was developed by our licensee, uniQure. In 2012, Glybera was approved in the EU and, in July 2013, uniQure announced that it had entered into a partnership with Chiesi Farmaceutici S.p.A., or Chiesi, for the commercialization of Glybera in the EU and more than a dozen other countries, including Brazil, China, Mexico and Russia. We believe that Chiesi plans to launch Glybera in the fourth quarter of 2014 or the first quarter of 2015 in Europe, and that uniQure is pursuing a U.S. product approval strategy, with plans to file a Biologics License Application, or BLA, with the U.S. Food and Drug Administration, or FDA, in 2017. Glybera has received orphan drug designation for the treatment of LPLD in both the EU and the U.S.

We are eligible to receive mid single-digit royalties on net sales of the licensed products, for sales made by uniQure and its affiliates. The royalty rates are reduced to a low single-digit for sales made by uniQure and its affiliates in countries where a licensed technology or a licensed product is not covered by a valid patent claim. With respect to uniQure's sublicense to Chiesi, we are eligible to receive a percentage in the low twenties of all non-royalty compensation relating to the licensed technology or products that uniQure receives from Chiesi (for example, upfront payments and milestone payments), a percentage in the low twenties of any royalties that uniQure receives from Chiesi based on sales of technology or products covered by the licensed patents, plus a mid single-digit percentage of certain further royalties that uniQure receives from Chiesi based on sales of our licensed technology or products after the expiration of all licensed patents covering the product.

Product Candidates in Development

TV-45070 for the Treatment of Pain: TV-45070 (formerly XEN402) is a small-molecule inhibitor of the sodium channel Nav1.7 and other sodium channels, including those that are expressed in the pain-sensing peripheral nervous system. TV-45070 has potentially broad application in nociceptive pain, mediated by damage or injury to tissues, including the pain sensitivity caused by inflammation, and neuropathic pain mediated by damage, dysfunction or injury of nerves. TV-45070 is partnered with Teva. Pursuant to the terms of the agreement, Teva is obligated to complete three Phase 2 or later stage clinical trials. Using a topical ointment formulation of TV-45070, Teva has initiated a 300-patient, randomized Phase 2b clinical trial in OA of the knee with data expected in the third quarter of 2015. Teva is also developing topical TV-45070 in neuropathic pain indications, and is planning a Phase 2b clinical trial in patients with postherpetic neuralgia, or PHN, that is expected to start in the first half of 2015. In addition, we are working with Teva to evaluate the opportunity to develop TV-45070 for the orphan disease erythromelalgia, or EM. TV-45070 has received both fast track and orphan designations from the FDA for the treatment of EM.

We selected Nav1.7 as a drug target for pain after we discovered that the Nav1.7 protein is deficient in the rare genetic disorder congenital indifference to pain, or CIP, sufferers of which are unable to feel pain. We have observed promising evidence of activity for TV-45070 in four Phase 2 proof-of-concept clinical trials, including two trials in EM, one trial in PHN and one trial in dental pain, a form of nociceptive pain.

In December 2012, we entered into a collaborative development and license agreement with Teva, pursuant to which we granted Teva an exclusive worldwide license to develop and commercialize TV-45070. Under the terms of the agreement, Teva made an upfront payment to us of $41.0 million. In addition, we are eligible to receive potential milestone payments totaling up to $335.0 million, comprised of a $20.0 million clinical milestone payment, up to $285.0 million in regulatory milestone payments, and a $30.0 million sales-based milestone payment. If TV-45070 is approved, we are also eligible to receive royalties in the low teens to the low twenties on net sales of the licensed products for the timeframe that such products are covered by the licensed patents and in certain other instances. We have an option to obtain a 20% to 30% co-promotion interest for products incorporating TV-45070 in the U.S., which is exercisable upon the filing of the first new drug application, or NDA, for a TV-45070 product. If we exercise this option, upon paying an opt-in fee to Teva, we will be eligible to receive, in lieu of royalties with respect to such product sales in the U.S., a share of operating profits from any product sales in the U.S. that is equal to our percent interest of detailing activities and co-promotion expenses.

GDC-0276 and Other Selective Inhibitors of Nav1.7 for the Treatment of Pain: In December 2011, we entered into a collaborative research and license agreement with Genentech and its affiliate, F. Hoffmann-La Roche Ltd, or Roche, to discover and develop selective oral inhibitors of Nav1.7 for the treatment of pain. Based on our discovery of the Nav1.7 deficiency associated with CIP, we believe that Nav1.7 is a highly-validated target for the treatment of pain. Our Genentech collaboration is focused on discovering and developing selective oral Nav1.7 inhibitors, which is in contrast to our Teva partnership that is focused on developing a topical drug that targets a number of different sodium channels, including Nav1.7.

The first small-molecule, preclinical product candidate that was selected for development under our collaboration is GDC-0276. In August 2014, Genentech received approval from Health Canada to initiate a Phase 1 clinical trial for GDC-0276. Under the terms of the agreement, Genentech paid us an upfront fee of $10.0 million, a $5.0 million milestone payment for the selection of GDC-0276 for development and an $8.0 million milestone payment was earned upon the approval by Health Canada of the CTA for GDC-0276. We are also eligible to receive pre-commercial and commercial milestone payments with respect to the licensed products totaling up to an additional $613.0 million, comprised of up to $45.5 million in preclinical and clinical milestone payments, up to $387.5 million in regulatory milestone payments, and up to $180.0 million in sales-based milestone payments for multiple products and indications. In addition, we are eligible to receive royalties based on net sales of the licensed products, which range from a mid single-digit percentage to 10 percent for small-molecule inhibitors for the timeframe that such products are covered by the licensed patents and a low single-digit percentage thereafter, plus a low single-digit percentage for large-molecule inhibitors of Nav1.7.

Chronic pain conditions, such as severe cancer pain and neuropathic pain, are generally recognized as unmet medical needs providing potential commercial opportunities for a new oral pain drug. Currently available pain drugs often have either a lack of meaningful pain relief or dose-limiting side effects for many patients. An orally administered selective Nav1.7 inhibitor could present a novel mechanism for the treatment of moderate to severe pain as a single agent or in combination with existing analgesics that work through different mechanisms.

Xenon's Proprietary Preclinical Product Candidates

We are leveraging our core expertise in the genetics of rare diseases and ion channel disorders to identify novel targets and discover differentiated, proprietary product candidates. We are focusing on orphan and niche disease product candidates which we believe we can develop and commercialize independently. We expect our independent development to expand the therapeutic and commercial value of our proprietary pipeline and advance our goals of building a self-sustaining, fully-integrated and profitable company.

Selective Small-Molecule Sodium Channel Inhibitors for the Treatment of Dravet Syndrome

We are developing selective inhibitors of the voltage-gated sodium channel Nav1.6 as a treatment for the orphan disease Dravet Syndrome, or DS. We have developed considerable expertise in voltage-gated sodium channel biology and have accumulated significant experience in the development of selective channel inhibitors. We are leveraging this expertise and chemistry know-how for the development of selective inhibitors of Nav1.6. for the treatment of DS.

DS is a severe form of childhood epilepsy that typically causes mental retardation and, in approximately 10% of cases, premature death before the age of 12 years. The frequency of DS in the U.S. has been estimated to be one in 20,000 to 40,000 births, which, when applied to U.S. federal census data, correlates to approximately 7,500 to 15,000 patients with DS in the U.S.

Based on our experience and know-how in developing selective ion channel inhibitors, we have identified potent, selective Nav1.6 inhibitors. We expect to have preclinical proof-of-concept data in the second half of 2014 in animal models of DS. We anticipate filing an IND for a drug candidate to treat DS in 2016. Given the orphan nature of this disorder, we believe that DS may represent an attractive opportunity for us to advance independently.

XEN801 for the Treatment of Acne

XEN801 is a selective, small molecule inhibitor of stearoyl Co-A desaturase, or SCD1, being developed for the treatment of moderate to severe acne. SCD1 is an enzyme involved in lipid synthesis that is expressed in sebaceous glands in the skin. Mice deficient in SCD1 have a marked phenotype of sebaceous gland atrophy suggesting that inhibition of SCD1 activity in the skin may provide a novel treatment option for disorders of enlarged or overactive sebaceous glands, including acne. We have discovered and developed novel small-molecule SCD1 inhibitors to which we have sole rights. In multiple animal models, we have shown that our SCD1 inhibitors can reduce the size and number of sebaceous glands. XEN801 has demonstrated good properties for topical administration, including formulation in a light gel and adequate skin penetration in multiple animal species.

We anticipate selecting a development candidate for IND-enabling studies in the second half of 2014 and filing an IND in the first half of 2015 to initiate clinical development. We believe a selective, small-molecule inhibitor of SCD1 has therapeutic potential for skin disorders such as moderate to severe acne, seborrhoea and sebaceous hyperplasia.

Selective Small-Molecule Inhibitors of Targets for the Treatment of Cardiovascular Disease

We entered into a collaborative research and option agreement with Merck in June 2009 to discover novel targets and compounds for the treatment of cardiovascular disease using our Extreme Genetics discovery platform. In 2012, Merck exercised its option to obtain an exclusive license to a target for the treatment of cardiovascular disease and compound inhibitors that were discovered during the research collaboration. The target, when inhibited, is predicted to provide a beneficial lipid profile with the goal of protecting from cardiovascular disease.

New Pipeline Opportunities

Given the commercial opportunity and the pharmaceutical industry's interest in the pain market, we are using our Extreme Genetics discovery platform and specialized insights into the biology of pain to identify new drug targets for this common medical problem. We formed a second collaboration with Genentech in March 2014 for pain genetics, pursuant to which we intend to focus on rare phenotypes where individuals have an inability to perceive pain or where individuals have non-precipitated spontaneous severe pain. We believe these phenotypes may unlock new key molecular regulators of pain signaling in humans, which we will seek to validate as targets for new pain drugs. For example, we are analyzing CIP families that are not explained by Nav1.7 deficiency as well as families with severe pain phenotypes, such as paroxysmal extreme pain disorder, or PEPD, and inherited EM.

In addition to our study of rare human disorders of extreme pain or the absence of pain, we are studying other rare disorders with extreme phenotypes that we believe could yield new drug targets in disorders where high medical need exists, such as neurological disorders like essential tremor and cluster headache.

In addition, given our expertise in ion channel drug discovery, we are also focusing our discovery efforts on the identification of ion channel targets where we believe novel selective inhibitors might represent significant therapeutic advances with a focus on orphan indications.

Strategic Alliances

We have strategically and selectively established multiple collaborations with leading pharmaceutical companies, including uniQure, Teva, Genentech and Merck.

These collaborations have validated our discovery platform and allowed us to expand and augment our internal discovery and development capabilities and know-how while providing us with significant, non-dilutive funding as well as the potential for future milestone payments, royalty income and commercial participation.

We believe that we have successfully implemented our partnering model by leveraging collaborations to front-load our product pipeline with clinical programs in large market opportunities that are of broad strategic value to our partners, that leverage their established therapeutic expertise and commercial focus, and that they are advancing into later stages of development. At the same time, these partnerships have provided us with the resources to independently advance our proprietary programs in orphan indications into development, and potentially commercialization. We believe that these partnerships enable us to build on our core competencies with greater focus, speed and capital efficiency than we could have achieved independently, and have positioned us to potentially reach a number of near-term value-creating milestones. For additional information regarding our collaborations, please see the section of this prospectus captioned “Business — Strategic Alliances.”

Our Strategy

Our goal is to build a self-sustaining, fully-integrated and profitable company that discovers, develops and commercializes innovative therapeutics, including novel selective ion channel inhibitors, by applying our expertise in the genetics of rare human diseases.

Since our inception, we believe we have operated in a capital-efficient manner to build our capabilities and assets through phased growth, expansion and value creation. Since our last equity financing in 2006, we have funded our operations and expanded our platform, product pipeline and infrastructure through a strategy that combines the deployment of our own resources and the establishment of broadly enabling and well-structured pharmaceutical partnerships with industry leaders.

Our strategy is to:

- *Expand our pipeline and advance multiple discovery and development programs, focusing on orphan and niche disease market opportunities that we can independently develop and commercialize ourselves.*
- *Selectively establish additional partnerships enabling us to access large commercial indications while leveraging the benefits of those collaborations to expand our internal capabilities.*
- *Further leverage our discovery platform and insights into disease biology to identify novel targets and develop next-generation products.*

For additional information about our business, please see the section of this prospectus captioned “Business.”

Risks Associated with Our Business

Our ability to implement our current business strategy is subject to numerous risks, as more fully described in the section entitled “Risk Factors” immediately following this prospectus summary. These risks include, among others:

- We have incurred significant losses since our inception and anticipate that we will continue to incur significant losses for the foreseeable future.
- We have not generated any royalty revenue from product sales and may never become profitable from royalty revenue.
- We will likely need to raise additional funding, which may not be available on acceptable terms, if at all.
- Our existing collaborations are important to our business, and future collaborations may also be important to us. If we are unable to maintain any of these collaborations, or if these collaborations are not successful, our business could be adversely affected.
- Clinical drug development involves a lengthy and expensive process with uncertain timelines and outcomes. If clinical trials are prolonged or delayed, we, or our collaborators, may be unable to commercialize our product candidates on a timely basis.
- The regulatory approval processes of the FDA, the European Medicines Agency, or EMA, and regulators in other jurisdictions are lengthy, time-consuming and inherently unpredictable. If we, or our collaborators, are unable to obtain timely regulatory approval for our product candidates, our business will be substantially harmed.

- We and our collaborators face substantial competition in the markets for our product candidates.
- The novelty of gene therapy products and their lack of a commercial track record may hinder market acceptance of Glybera.
- Our approach to drug discovery is unproven, and we do not know whether we will be able to develop any products of commercial value.
- We could be unsuccessful in obtaining or maintaining adequate patent protection for one or more of our products or product candidates.
- The limited patient population for orphan and niche indications may prevent us from accurately estimating the market opportunity for our product candidates or enrolling sufficient patients for our clinical trials.

For additional information about the risks we face, please see the section of this prospectus captioned “Risk Factors.”

Implications of Being an Emerging Growth Company

As a company with less than $1.0 billion in revenue during our last fiscal year, we qualify as an “emerging growth company” as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act. An emerging growth company may take advantage of specified reduced reporting requirements that are otherwise applicable generally to public companies. These provisions include:

- a requirement to have only two years of audited financial statements and only two years of related management’s discussion and analysis;
- an exemption from compliance with the auditor attestation requirement on the effectiveness of our internal controls over financial reporting;
- an exemption from compliance with any requirement that the Public Company Accounting Oversight Board may adopt regarding mandatory audit firm rotation or a supplement to the auditor’s report providing additional information about the audit and the financial statements;
- reduced disclosure about our executive compensation arrangements; and
- exemptions from the requirements to obtain a non-binding advisory vote on executive compensation or a shareholder approval of any golden parachute arrangements.

Under the JOBS Act, we will remain an “emerging growth company” until the earliest of:

- the last day of the fiscal year during which we have total annual gross revenue of $1.0 billion or more;
- the last day of the fiscal year following the fifth anniversary of the effective date of the registration statement of which this prospectus forms a part;
- the date on which we have, during the previous three-year period, issued more than $1.0 billion in non-convertible debt; or
- the date on which we are deemed to be a “large accelerated filer” under the Securities Exchange Act of 1934, as amended, or the Exchange Act (we will qualify as a large accelerated filer as of the first day of the first fiscal year after we have (i) more than $700.0 million in outstanding common equity held by our non-affiliates and (ii) been public for at least 12 months; the value of our outstanding common equity will be measured each year on the last day of our second fiscal quarter).

We may choose to take advantage of some of the available benefits under the JOBS Act, and have taken advantage of some reduced reporting requirements in this prospectus. Accordingly, the information contained herein may be different than the information you receive from other U.S. public companies in which you hold stock.

In addition, the JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. This provision allows an emerging growth company to delay the adoption of some accounting standards until those standards would otherwise apply to private companies. However, we are choosing to "opt out" of such extended transition period, and as a result, we will comply with new or revised accounting standards on the relevant dates on which adoption of such standards is required for non-emerging growth companies. Section 107 of the JOBS Act provides that our decision to opt out of the extended transition period for complying with new or revised accounting standards is irrevocable.

Corporate Information

We were incorporated in the Province of British Columbia on November 5, 1996 under the predecessor to the Business Corporations Act (British Columbia) under the name "Xenon Bioresearch Inc." We continued from British Columbia to the federal jurisdiction pursuant to Section 187 of the Canada Business Corporations Act, or the CBCA, on May 17, 2000 and concurrently changed our name to "Xenon Genetics Inc." We registered as an extra-provincial company in British Columbia on July 10, 2000 and changed our name to "Xenon Pharmaceuticals Inc." on August 24, 2004. We have no subsidiaries. Our principal executive offices are located at 200 – 3650 Gilmore Way, Burnaby, British Columbia, Canada V5G 4W8, and our telephone number is (604) 484-3300. Our website address is http://www.xenon-pharma.com. We are currently not a reporting issuer, or the equivalent, in any province or territory of Canada and our shares are not listed on any recognized Canadian stock exchange, but we expect to become a reporting issuer in British Columbia, Alberta and Ontario upon completion of this offering. The information contained in, or that can be accessed through, our website is not part of this prospectus.

The Xenon logo, "Extreme Genetics™" and other trademarks or service marks of Xenon appearing in this prospectus are trademarked and are the property of Xenon as is the Xenon corporate name. This prospectus contains references to our trademarks and service marks and to those belonging to other entities, including "Glybera®," which is the property of uniQure. Solely for convenience, trademarks and trade names referred to in this prospectus, including logos, artwork and other visual displays, may appear without the ® or ™ symbols, but such references are not intended to indicate in any way that we will not assert, to the fullest extent under applicable law, our rights or the rights of the applicable licensor to these trademarks and trade names. We do not intend our use or display of other entities' trade names, trademarks or service marks to imply a relationship with, or endorsement or sponsorship of us by, any other entity.

The Offering

Common shares offered by us	common shares
Common shares to be outstanding after this offering	common shares (or if the underwriters exercise their option to purchase additional common shares in full)
Option to purchase additional common shares	We have granted the underwriters an option for 30 days from the date of this prospectus to purchase up to additional common shares.
Use of proceeds	We estimate that the net proceeds from this offering will be approximately $ million, or approximately $ million if the underwriters exercise in full their option to purchase additional common shares, at an assumed initial public offering price of $ per share (the midpoint of the price range set forth on the cover page of this prospectus), after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. We currently expect to use the net proceeds from this offering: (1) to fund preclinical and early clinical development of our DS and XEN801 programs; (2) to fund genetic research and drug discovery activities using our Extreme Genetics discovery platform; and (3) for working capital and general corporate purposes. We may also use a portion of the net proceeds in connection with any exercise of co-development or co-promotion rights under our strategic alliances; however, no such rights are currently exercisable. In addition, we may also use a portion of the net proceeds to acquire, license and invest in complementary products, technologies or businesses; however, we currently have no agreements or commitments to complete any such transaction. See “Use of Proceeds.”
Proposed ticker symbol on The NASDAQ Global Market	“XENE”

The number of common shares to be outstanding after this offering is based on 44,152,979 common shares outstanding as of June 30, 2014 and excludes the following:

- 7,013,578 common shares issuable upon exercise of options outstanding as of June 30, 2014, with a weighted-average exercise price of CAD$0.96 per common share, or $0.90 per common share, as converted; and
- 2,000,000 common shares reserved for future issuance under our 2014 Equity Incentive Plan, as amended, which will become effective on the business day immediately prior to the effective date of the registration statement of which this prospectus forms a part, and any future automatic increase in common shares reserved for issuance under such plan.

Except as otherwise indicated, this prospectus:

- reflects the conversion of all outstanding preferred shares into an aggregate of 37,549,041 common shares upon the closing of this offering, including the conversion of all of our outstanding Series A preferred shares and Series B preferred shares into 10,431,507 common shares and the conversion of all of our outstanding Series E preferred shares into 27,117,534 common shares, based upon an assumed initial public offering price of $ per share (the midpoint of the price range set forth on the cover page of this prospectus) and the adjustment provisions relating to our Series E preferred shares described in “Description of Share Capital;”

- reflects the automatic conversion of 51,810 subscription rights into the same number of common shares immediately prior to the closing of this offering;
- assumes the filing of certain amendments to our articles of continuance prior to the closing of this offering;
- assumes no exercise by the underwriters of their option to purchase additional common shares;
- reflects a for reverse share split of our common and preferred shares to be effected prior to the closing of this offering; and
- with respect to financial measures, is presented in accordance with U.S. generally accepted accounting principles, or U.S. GAAP.

Summary Financial Data

We have derived the following summary of statements of operations data for the years ended December 31, 2011, 2012 and 2013 from audited financial statements appearing elsewhere in this prospectus. We derived the following statements of operations data for the six months ended June 30, 2013 and 2014 and the balance sheet data as of June 30, 2014 from unaudited interim financial statements included elsewhere in this prospectus. In the opinion of management, the unaudited interim financial statements reflect all adjustments, which include only normal recurring adjustments, necessary for a fair presentation of the financial statements. Historical results are not necessarily indicative of the results that may be expected in the future and the results for the six months ended June 30, 2014 are not necessarily indicative of the results that may be expected for the full year or any other period. The summary financial data set forth below should be read together with the financial statements and the related notes to those statements, as well as the sections of this prospectus captioned "Selected Financial Data" and "Management's Discussion and Analysis of Financial Condition and Results of Operations." Our audited annual financial statements and unaudited interim financial statements have been prepared in accordance with U.S. GAAP.

	YEAR ENDED DECEMBER 31,			SIX MONTHS ENDED JUNE 30,	
	2011	2012	2013	2013	2014
				(unaudited)	
	(in thousands, except per share data)				
Statement of Operations Data:					
Revenue:					
Collaboration revenue	$ 6,915	$ 14,300	$ 27,352	$ 10,985	$ 10,297
Royalties	3	8	4	—	2
	6,918	14,308	27,356	10,985	10,299
Operating expenses:					
Research and development	12,302	10,455	12,303	6,983	5,099
General and administrative	6,730	7,006	5,341	2,828	2,790
Total operating expenses	19,032	17,461	17,644	9,811	7,889
Income (loss) from operations	(12,114)	(3,153)	9,712	1,174	2,410
Other income (expense):					
Interest income	153	144	338	76	278
Interest expense	(91)	(93)	(64)	(41)	—
Foreign exchange gain (loss)	60	(169)	2,035	1,920	(85)
Gain (loss) on write-off and disposal of assets	—	(1,030)	11	11	—
Net income (loss)	(11,992)	(4,301)	12,032	3,140	2,603
Net income (loss) attributable to participating securities	—	—	8,199	3,140	2,603
Net income (loss) attributable to common shareholders	$ (11,992)	$ (4,301)	$ 3,833	$ —	$ —
Net income (loss) per share—basic	$ (1.86)	$ (0.67)	$ 0.59	$ 0.00	$ 0.00
Net income (loss) per share—diluted	$ (1.86)	$ (0.67)	$ 0.39	$ 0.00	$ 0.00
Weighted-average common shares outstanding used in computing basic net income (loss) per share	6,433	6,452	6,501	6,478	6,548
Weighted-average common shares outstanding used in computing diluted net income (loss) per share	6,433	6,452	9,765	6,478	6,548
Pro forma net income (loss) per share—basic(1)			$ 0.27		$ 0.06
Pro forma net income (loss) per share—diluted(1)			$ 0.25		$ 0.05
Weighted-average common shares outstanding used in computing the proforma net income (loss) per share—basic (1)			44,110		44,155
Weighted-average common shares outstanding used in computing the proforma net income (loss) per share—diluted (1)			47,314		47,765

	AS OF JUNE 30, 2014	
	ACTUAL	PRO FORMA AS ADJUSTED[(2)]
	(unaudited) (in thousands)	
Balance Sheet Data:		
Cash, cash equivalents and marketable securities	$ 44,710	$
Working capital	27,977	
Total assets	50,712	
Redeemable convertible preferred shares	102,488	—
Total shareholders' deficit	(75,382)	

(1) Pro forma net income (loss) per share represents net income (loss) divided by the pro forma weighted-average shares outstanding, and reflects (i) the conversion of all outstanding preferred shares into an aggregate of 37,549,041 common shares, including the conversion of all of our outstanding Series A preferred shares and Series B preferred shares into 10,431,507 common shares and the conversion of all of our outstanding Series E preferred shares into 27,117,534 common shares, based upon an assumed initial public offering price of $ per share (the midpoint of the price range set forth on the cover page of this prospectus) and the adjustment provisions relating to our Series E preferred shares described in "Description of Share Capital," upon the closing of this offering, and (ii) the conversion of the weighted-average number of outstanding subscription rights for the period into common shares.

(2) Reflects, on a pro forma basis, the automatic conversion described in footnote (1) and, on an as adjusted basis, the sale and issuance by us of common shares hereunder at an assumed initial public offering price of $ per share (the midpoint of the price range set forth on the cover of this prospectus) after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. Each $1.00 increase (decrease) in the assumed initial public offering price of $ per share, would increase (decrease) each of cash, cash equivalents and marketable securities, working capital, total assets and total shareholders' deficit by approximately $ million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. We may also increase or decrease the number of shares we are offering. Each increase (decrease) of in the number of shares offered by us would increase (decrease) each of cash, cash equivalents and marketable securities, working capital, total assets and total shareholders' deficit by approximately $ million, assuming that the assumed initial public offering price remains the same, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. The pro forma as adjusted information discussed above is illustrative only and will adjust based on the actual initial public offering price and other terms of this offering determined at pricing.

RISK FACTORS

Investing in our common shares involves a high degree of risk. You should carefully consider the risks and uncertainties described below together with all of the other information contained in this prospectus, including our financial statements and the related notes appearing at the end of this prospectus and "Management's Discussion and Analysis of Financial Condition and Results of Operations," before deciding whether to invest in our common shares. If any of the following risks actually occur, our business, growth prospects, operating results and financial condition could suffer materially, the trading price of our common shares could decline and you could lose all or part of your investment.

Risks Related to Our Financial Condition and Capital Requirements

We have incurred significant losses since our inception and anticipate that we will continue to incur significant losses for the foreseeable future.

We are a clinical-stage biotechnology company and, other than the year ended December 31, 2013 and the six months ended June 30, 2014, we have recorded net losses in each reporting period since inception in 1996, and we do not expect to have sustained profitability for the foreseeable future. We had net losses of $12.0 million and $4.3 million for the years ended December 31, 2011 and 2012, respectively, and had an accumulated deficit of $114.1 million as of June 30, 2014.

We have devoted most of our financial resources to research and development, including our clinical and preclinical development activities. To date, we have financed our operations through the sale of equity securities and funding received from our licensees and collaborators. We have not generated any royalty revenue from product sales and our product candidates will require substantial additional investment before they will provide us with any product royalty revenue.

We expect to incur significant expenses and increasing operating losses for the foreseeable future as we:

- continue our research and preclinical and clinical development of our product candidates;
- expand the scope of our clinical studies for our current and prospective product candidates;
- initiate additional preclinical, clinical or other studies for our product candidates, including under our collaboration agreements;
- change or add additional manufacturers or suppliers;
- seek regulatory and marketing approvals for any of our product candidates that successfully complete clinical studies;
- seek to identify and validate additional product candidates;
- acquire or in-license other product candidates and technologies;
- make milestone or other payments under our in-license agreements including, without limitation, our agreements with the University of British Columbia, or UBC, and the Memorial University of Newfoundland;
- maintain, protect and expand our intellectual property portfolio;
- establish a sales, marketing and distribution infrastructure to commercialize any products for which we or one of our collaborators may obtain marketing approval, and for which we have maintained commercial rights;
- create additional infrastructure to support our operations as a public company and our product development and planned future commercialization efforts; and
- experience any delays or encounter issues with any of the above.

Our expenses could increase beyond expectations for a variety of reasons, including if we are required by the U.S. Food and Drug Administration, or FDA, the European Medicines Agency, or EMA, or other regulatory agencies, domestic or foreign, to perform clinical and other studies in addition to those that we currently anticipate. Our prior losses, combined with expected future losses, have had and will continue to have an adverse effect on our shareholders' equity.

We have not generated any royalty revenue from product sales and may never become profitable on a U.S. GAAP basis.

Our ability to generate meaningful revenue and achieve profitability on a U.S. GAAP basis depends on our ability, alone or with strategic collaborators, to successfully complete the development of, and obtain the regulatory approvals necessary to commercialize, our product candidates. Substantially all of our revenue since inception has consisted of upfront and milestone payments associated with our collaboration and license agreements. Revenue from these agreements is dependent on successful development of our product candidates by us or our collaborators. To date, we have not generated any royalty revenue from product sales, and do not otherwise anticipate generating revenue from product sales other than from sales of Glybera under our license to uniQure Biopharma B.V., or uniQure, for the foreseeable future, if ever. If any of our product candidates fail in clinical trials or do not gain regulatory approval, or if Glybera or any of our future products, if any, once approved, fails to achieve market acceptance or adequate market share, we may never become profitable. Although we were profitable for the year ended December 31, 2013 and the six months ended June 30, 2014, we may not be able to sustain profitability in subsequent periods. Our ability to generate future revenue from product sales depends heavily on our success, and the success of our collaborators, in:

- completing research, preclinical and clinical development of our product candidates;
- seeking and obtaining regulatory and marketing approvals for product candidates for which we complete clinical studies;
- commercializing products for which we obtain regulatory and marketing approval, either with a collaborator or, if launched independently, by establishing sales, marketing and distribution infrastructure;
- negotiating favorable terms in any collaboration, licensing or other arrangements into which we may enter;
- obtaining market acceptance of products for which we obtain regulatory and marketing approval as therapies;
- addressing any competing technological and market developments;
- establishing and maintaining supply and manufacturing relationships with third parties that can provide adequate (in amount and quality) products and services to support clinical development and the market demand for any approved products in the future;
- developing a sustainable, scalable, reproducible, and transferable manufacturing processes for any of our products approved in the future;
- maintaining, protecting, expanding and enforcing our portfolio of intellectual property rights, including patents, trade secrets and know-how;
- implementing additional internal systems and infrastructure, as needed; and
- attracting, hiring and retaining qualified personnel.

The scope of our future revenue will also depend upon the size of any markets in which our product candidates receive approval and the availability of insurance coverage and the availability and amount of reimbursement from third-party payers for Glybera and future products, if any. If we are unable to achieve sufficient revenue to become profitable and remain so, our financial condition and operating results will be negatively impacted, and our trading price might be harmed.

Even if this offering is successful, we will likely need to raise additional funding, which may not be available on acceptable terms, if at all. Failure to obtain this necessary capital when needed may force us to delay, limit or terminate our product development efforts or other operations.

Since our inception, we have dedicated most of our resources to the discovery and development of our proprietary preclinical and clinical product candidates, and we expect to continue to expend substantial resources doing so for the foreseeable future. These expenditures will include costs associated with research and development, manufacturing of product candidates and products approved for sale, conducting preclinical experiments and clinical trials and obtaining and maintaining regulatory approvals, as well as commercializing any products later approved for sale. During the six months ended June 30, 2014, we incurred approximately $5.1 million of costs associated with research and development, exclusive of costs incurred by our collaborators in developing our current product and product candidates.

The anticipated net proceeds from this offering are not expected to be sufficient to complete clinical development of any of our product candidates and prepare for commercializing any product candidate which receives regulatory approval. Accordingly, we will likely require substantial additional capital beyond the expected proceeds of this offering to continue our clinical development and potential commercialization activities. Our future capital requirements depend on many factors, including but not limited to:

- the number and characteristics of the future product candidates we pursue;
- the scope, progress, results and costs of independently researching and developing any of our future product candidates, and conducting preclinical research and clinical trials;
- whether our existing collaborations continue to generate substantial milestone payments and, ultimately, royalties on future products for us;
- the timing of, and the costs involved in, obtaining regulatory approvals for any future product candidates we develop independently;
- the cost of future commercialization activities, including activities required pursuant to our option to co-promote TV-45070, if exercised by us, and the cost of commercializing any future products we develop independently that are approved for sale;
- the cost of manufacturing our future products, if any;
- our ability to maintain existing collaborations and to establish new collaborations, licensing or other arrangements and the financial terms of such agreements;
- the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing patents, including litigation costs and the outcome of such litigation; and
- the timing, receipt and amount of sales of, or royalties on, Glybera, and our future products, if any.

We are unable to estimate the funds we will actually require to complete research and development of our product candidates or the funds required to commercialize any resulting product in the future.

Upon the completion of this offering, based upon our anticipated operating expenditures, we expect that the net proceeds from this offering, research funding that we expect to receive under our existing collaborations and our existing cash, cash equivalents and marketable securities will be sufficient to fund our current operations for at least the next 12 to 24 months. However, our operating plan may change as a result of many factors currently unknown to us, and we may need to seek additional funds sooner than planned, through public or private equity or debt financings, government or other third-party funding, marketing and distribution arrangements and other collaborations, strategic alliances and licensing arrangements or a combination of these approaches. Raising funds in the future may present additional challenges and future financing may not be available in sufficient amounts or on terms acceptable to us, if at all.

Raising additional capital may cause dilution to our existing shareholders, restrict our operations or require us to relinquish rights to our technologies or product candidates.

The terms of any financing arrangements we enter into may adversely affect the holdings or the rights of our shareholders and the issuance of additional securities, whether equity or debt, by us, or the possibility of such issuance, may cause the market price of our shares to decline. The sale of additional equity or convertible securities would dilute all of our shareholders. The incurrence of indebtedness would result in increased fixed payment obligations and, potentially, the imposition of restrictive covenants. Those covenants may include limitations on our ability to incur additional debt, limitations on our ability to acquire, sell or license intellectual property rights and other operating restrictions that could adversely impact our ability to conduct our business. We could also be required to seek funds through arrangements with collaborators or otherwise at an earlier stage than otherwise would be desirable resulting in the loss of rights to some of our product candidates or other unfavorable terms, any of which may have a material adverse effect on our business, operating results and prospects. In addition, any additional fundraising efforts may divert our management from their day-to-day activities, which may adversely affect our ability to develop and commercialize our product candidates.

Unstable market and economic conditions may have serious adverse consequences on our business and financial condition.

Global credit and financial markets experienced extreme disruptions at various points over the last decade, characterized by diminished liquidity and credit availability, declines in consumer confidence, declines in economic growth, increases in unemployment rates, and uncertainty about economic stability. If another such disruption in credit and financial markets and deterioration of confidence in economic conditions occurs, our business may be adversely affected. If the equity and credit markets were to deteriorate significantly in the future, it may make any necessary debt or equity financing more difficult to complete, more costly, and more dilutive. Failure to secure any necessary financing in a timely manner and on favorable terms could have a material adverse effect on our growth strategy, financial performance and share price and could require us to delay or abandon development or commercialization plans. In addition, there is a risk that one or more of our current collaborators, service providers, manufacturers and other partners would not survive or be able to meet their commitments to us under such circumstances, which could directly affect our ability to attain our operating goals on schedule and on budget.

We are subject to risks associated with currency fluctuations, and changes in foreign currency exchange rates could impact our results of operations.

Approximately 19% of our cash and cash equivalents as of June 30, 2014 was denominated in U.S. dollars. Historically, a portion of our operating expenses and a substantial portion of our revenue has been denominated in U.S. dollars. Because our functional currency is the Canadian dollar, changes in the exchange rate between the Canadian dollar and the U.S. dollar could materially impact our reported results of operations and distort period to period comparisons. In particular, because of the difference in the amount of our revenue and expenses that are in U.S. dollars relative to Canadian dollars, depreciation in the U.S. dollar relative to the Canadian dollar could result in a material increase in reported expenses relative to revenue, and therefore could cause our operating income (expense) to appear to decline materially, particularly relative to prior periods. The converse is true if the U.S. dollar were to appreciate relative to the Canadian dollar. Fluctuations in foreign currency exchange rates also impact the reporting of our receivables and payables in non-Canadian currencies. Translation gains or losses related to the translation of our net assets from our Canadian functional currency into the U.S. reporting currency are included as a component of accumulated comprehensive income on our balance sheet. As a result of such foreign currency fluctuations, it could be more difficult to detect underlying trends in our business and results of operations. In addition, to the extent that fluctuations in currency exchange rates cause our results of operations to differ from our expectations or the expectations of our investors, the trading price of our common shares could be adversely affected.

From time to time, we may engage in exchange rate hedging activities in an effort to mitigate the impact of exchange rate fluctuations. For example, we maintain a natural currency hedge against fluctuations in the U.S./Canadian foreign exchange rate by matching the amount of U.S. dollar and Canadian dollar investments to the expected amount of future U.S. dollar and Canadian dollar obligations, respectively. Any hedging technique we implement may fail to be effective. If our hedging activities are not effective, changes in currency exchange rates may have a more significant impact on the trading price of our common shares.

Risks Related to Our Business

We, or our collaborators, may fail to successfully develop our product candidates.

Our product candidates, including TV-45070 and GDC-0276 and compounds in our preclinical and discovery pipeline, are in varying stages of development and will require substantial clinical development, testing and regulatory approval prior to commercialization. It may be several more years before these product candidates or any of our other product candidates receive marketing approval, if ever. If any of our product candidates fail to become approved products, our business, growth prospects, operating results and financial condition may be adversely affected and a decline of our common share price could result. For example, in June 2013, we paid Isis Pharmaceuticals, Inc., or Isis, an option exercise fee of $2.0 million to obtain an exclusive license to develop, manufacture and commercialize antisense products under our collaboration and license agreement with Isis; however, in the fourth quarter of 2013, we discontinued development of product candidates under this program as the preclinical data did not support the continued advancement of any product candidates.

Our near-term operating revenue is partially dependent upon the regulatory and marketing efforts of uniQure, or its sublicensee, for the development and commercialization of Glybera.

Under the terms of our license agreement with uniQure, we rely on uniQure, or its sublicensees, to market Glybera and to obtain regulatory approval of Glybera. In July 2013, uniQure announced that it had granted to Chiesi Farmaceutici, S.p.A., or Chiesi, an Italian pharmaceutical firm, an exclusive license to commercialize Glybera in the European Union, or the EU, and certain other countries outside of North America and Japan. Despite the efforts of uniQure and Chiesi, Glybera may not gain market acceptance among physicians, patients, healthcare payers and the medical community. The commercial success of Glybera will depend on a number of factors, including:

- establishment and demonstration of clinical efficacy and safety and acceptance of the same by the medical community;
- commercialization of competing products;
- sufficient commercial supply of Glybera;
- cost-effectiveness of Glybera;
- the availability of coverage and adequate reimbursement from third parties, including governmental payers, managed care organizations, and private health insurers;
- the relative cost, safety and efficacy of therapies that exist now or may be developed in the future;
- whether the product can be manufactured in commercial quantities at acceptable cost;
- marketing and distribution support for Glybera;
- the effect of current and future healthcare laws;
- the acceptance of gene therapies as a class of treatment; and
- any market or regulatory exclusivities applicable to the product.

To date, the FDA has never approved any gene therapy product as a treatment for any indication in the U.S. and the FDA may never approve Glybera. Any failure of uniQure or its sublicensee to successfully commercialize Glybera could have a material adverse effect on our business, growth prospects, operating results and financial condition and could result in a substantial decline in the price of our common shares.

We and our collaborators face substantial competition in the markets for our product candidates, which may result in others discovering, developing or commercializing products before us or doing so more successfully than we or our collaborators do.

The biotechnology and pharmaceutical industries are characterized by rapidly advancing technologies, intense competition and a strong emphasis on proprietary products. We face potential competition in target discovery and product development from many different approaches and sources, including major pharmaceutical, specialty pharmaceutical and biotechnology companies, academic institutions and governmental agencies and public and private research institutions. Any product candidates that we or our collaborators successfully develop and commercialize will compete with existing products and any new products that may become available in the future.

The key competitive factors affecting the success of all of our product candidates, if approved, are likely to be their efficacy, safety, convenience and price; the effectiveness of alternative products; the level of generic competition; and the availability of coverage and adequate reimbursement from government and other third-party payors.

With respect to target discovery activities, competitors and other third parties, including academic and clinical researchers, may access rare families and identify novel targets for drug development before we do.

Many of the companies against which we are competing or against which we may compete in the future have significantly greater financial resources and expertise in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining regulatory approvals and marketing approved products than we, or our collaborators, do. Mergers and acquisitions in the pharmaceutical and biotechnology industries may result in even more resources being concentrated among a smaller number of our competitors. Smaller or early stage companies may also prove to be significant competitors, particularly through collaboration arrangements with large and established companies.

Our commercial opportunities could be reduced or eliminated if our competitors develop and commercialize products or therapies that are safer, more effective, have fewer or less severe side effects, are more convenient or are less expensive than any products that we may develop. Our competitors also may obtain FDA, EMA or other regulatory approval for their products more rapidly than we may obtain approval for ours, which could result in our competitors establishing a strong market position before we are able to enter the market. In addition, our ability to compete may be affected by decisions made by insurers or other third party payors.

To the extent that we are unable to compete effectively against one or more of our competitors in these areas, our business will not grow and our financial condition, results of operations and common share price may suffer.

There are no approved gene therapies currently on the market for lipoprotein lipase deficiency, or LPLD, in the U.S. The current management of LPLD consists of strict adherence to an extremely low-fat diet, but compliance with such a diet is challenging. Lipid-lowering drugs are generally not effective for treating LPLD. We are not aware of any other drugs or therapies currently in development that treat LPLD by using the lipoprotein lipase, or LPL, sequence containing the LPL^{S447X} genetic variant or otherwise.

Drug discovery and development for various pain applications is intensely competitive. There are a large number of approved products for neuropathic pain, inflammatory pain and other pain indications. These approved products include capsaicin, celecoxib, lidocaine, narcotic analgesics and pregabalin. We are also aware of clinical-stage development programs at several pharmaceutical and biotechnology companies that are targeting Nav1.7 inhibitors to develop products to treat various pain indications, including Bioline Rx Ltd., Convergence Pharmaceuticals Limited, Dainippon Sumitomo Co., Ltd. and Pfizer, Inc. Moreover, we are aware of various other product candidates in development that target other mechanisms of action to treat various pain indications. We are not aware of any drugs or therapies currently approved specifically for treating primary erythromelalgia, or EM.

The novelty of gene therapy products and their lack of a commercial track record may hinder market acceptance of Glybera among physicians, patients, healthcare payers and the medical community.

Glybera is the first gene therapy product approved in the EU and no gene therapy product has been approved in the U.S. Because Glybera is likely to be the first gene therapy to be marketed in the EU, gaining market acceptance and overcoming any safety or efficacy concerns may be more challenging than for a more traditional therapy. Glybera's commercial success will depend, in part, on the success of efforts to educate the market regarding gene therapy products. In particular, the success of Glybera will depend upon physicians who treat patients with LPLD, prescribing Glybera. With respect to Glybera and any other gene therapy products we or a collaborator may develop, public perception may be influenced by claims that gene therapy is unsafe, and, if so, gene therapy may not gain the acceptance of the public or the medical community. More restrictive government regulations or negative public opinion could have a negative effect on our business or financial condition and may delay or impair the commercialization of Glybera. If Glybera is not successfully commercialized, our ability to generate near term revenue could be impaired.

We have no marketed products and have not yet advanced a product candidate beyond Phase 2 clinical trials, which makes it difficult to assess our ability to develop our future product candidates and commercialize any resulting products independently.

We have no experience in Phase 3 and later stage clinical development, and related regulatory requirements or the commercialization of products. uniQure controls and has been responsible for the development and commercialization of Glybera, Teva Pharmaceutical Industries Ltd., or Teva, is responsible for the on-going clinical development of TV-45070, and Genentech Inc., or Genentech, is responsible for the ongoing clinical development of GDC-0276. Accordingly, we have not yet demonstrated our ability to independently and repeatedly conduct clinical development after Phase 2, obtain regulatory approval and commercialize therapeutic products. We will need to develop such abilities if we are to execute on our business strategy to selectively develop and independently commercialize product candidates for orphan and niche indications. To execute on our business plan for the development of independent programs, we will need to successfully:

- execute our clinical development plans for later-stage product candidates;
- obtain required regulatory approvals in each jurisdiction in which we will seek to commercialize products;
- build and maintain appropriate sales, distribution and marketing capabilities;
- gain market acceptance for our future products, if any; and
- manage our spending as costs and expenses increase due to clinical trials, regulatory approvals and commercialization activities.

If we are unsuccessful in accomplishing these objectives, we would not be able to develop and commercialize any future orphan and niche disease product candidates independently, and could fail to realize the potential advantages of doing so.

If we are not successful in leveraging our Extreme Genetics discovery platform to discover product candidates in addition to TV-45070 and GDC-0276, our ability to expand our business and achieve our strategic objectives may be impaired.

We rely on our Extreme Genetics discovery platform to identify validated drug targets and develop new product candidates. To date, our Extreme Genetics discovery platform has yielded one approved product, Glybera, and our announced development candidates TV-45070 and GDC-0276. Use of our discovery platform requires substantial technical, financial and human resources, regardless of whether we identify any novel drug targets. Our Extreme Genetics discovery platform may initially show promise in identifying additional potential product candidates, yet fail to yield viable product candidates for clinical development or commercialization. Such failure may occur for many reasons, including the following: any product candidate may, on further study, be shown to have serious or unexpected side effects or other characteristics that indicate it is unlikely to be safe or otherwise does not meet applicable regulatory criteria; and any product candidate may not be capable of being produced in commercial quantities at an acceptable cost, or at all.

If we are unable to identify additional product candidates suitable for clinical development and commercialization, we may not be able to obtain product revenue in future periods, which likely would result in significant harm to our financial position and adversely impact our trading price.

Our approach to drug discovery is unproven, and we do not know whether we will be able to develop any products of commercial value.

Our Extreme Genetics discovery platform may not reproducibly or cost-effectively result in the discovery of product candidates and development of commercially viable products that safely and effectively treat human disease.

There are various challenges in utilizing our Extreme Genetics discovery platform to successfully identify novel drug targets, including locating families suffering from rare disorders and severe phenotypes, entering into agreements with foreign collaborators, complying with various domestic and foreign privacy laws, accessing required technologies in a timely manner and transporting DNA across national borders.

To date, only Glybera has been both developed using our Extreme Genetics discovery platform and approved for commercial sale. If the use of our Extreme Genetics discovery platform fails to identify novel targets for drug discovery, or such targets prove to be unsuitable for treating human disease, or we are unable to develop product candidates with specificity and selectivity for such targets, we will fail to develop viable products. If we fail to develop and commercialize viable products, we will not achieve commercial success.

We may encounter difficulties in managing our growth, including headcount, and expanding our operations successfully.

Our business strategy involves continued development and, where development is successful, commercialization of select successfully developed product candidates for orphan and niche indications independently. In order to execute on this strategy, we will need to build out a regulatory, sales, manufacturing, distribution and marketing infrastructure and expand our development capabilities or contract with third parties to provide these capabilities and infrastructure for us. To achieve this, we will need to identify, hire and integrate personnel who have not worked together as a group previously. We anticipate that we may need to hire additional accounting, legal and financial staff with appropriate public company experience and technical accounting and other knowledge to address the added burdens of operating as a public company. There are likely to be infrastructure costs associated with public company compliance as well.

As our operations expand, we expect that we will need to manage additional relationships with various strategic collaborators, suppliers and other third parties.

Dr. Gary Bridger, our Executive Vice President of Research and Development, works for us on a part-time, one-day-a-week basis, pursuant to a consulting agreement. Drs. Simon Pimstone and Y. Paul Goldberg each devote a small amount of their time to clinical work outside of their duties at our company, conducting, generally, two to three outpatient clinics per month. Future growth will impose significant added responsibilities on members of management, and our management may need to divert a disproportionate amount of its attention away from our day-to-day activities and devote a substantial amount of time to managing these growth activities.

If we are to effectively manage our growth, our expenses may increase more than expected, our ability to generate and grow revenue could be reduced, and we may not be able to implement our business strategy. Our future financial performance and our ability to commercialize product candidates and compete effectively will depend, in part, on our ability to effectively manage any future growth.

If we fail to attract and retain senior management and key personnel, we may be unable to successfully develop our product candidates, perform our obligations under our collaboration agreements, conduct our clinical trials and commercialize our product candidates.

Our success depends in part on our continued ability to attract, retain and motivate highly qualified management, clinical and scientific personnel.

We could experience difficulties attracting and retaining qualified employees as competition for qualified personnel in the biotechnology and pharmaceutical field is intense. We are highly dependent upon our senior management, particularly Dr. Pimstone, our Chief Executive Officer and President; Mr. Ian Mortimer, our Chief Financial Officer; and Dr. Goldberg, our Vice President, Clinical Development, as well as other employees. In the near future, the loss of services of any of these individuals or one or more of our other members of senior management could materially delay or even prevent the successful development of our product candidates.

In addition, we will need to hire additional personnel as we expand our clinical development activities and develop commercial capabilities, including a sales infrastructure to support our independent commercialization efforts. We may not be able to attract and retain personnel on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies for individuals with similar skill sets. The inability to recruit or loss of the services of any executive or key employee may impede the progress of our research, development and commercialization objectives.

Our employees, collaborators and other personnel may engage in misconduct or other improper activities, including non-compliance with regulatory standards and requirements and insider trading.

We are exposed to the risk of fraud or other misconduct by our employees, collaborators, vendors, principal investigators, consultants and commercial partners. Misconduct by these parties could include intentional failures to comply with the regulations of the FDA, EMA and other non-U.S. regulators, provide accurate information to the FDA, EMA and other non-U.S. regulators, comply with data privacy and security and healthcare fraud and abuse laws and regulations in the U.S. and abroad, report financial information or data accurately or disclose unauthorized activities to us. In particular, sales, marketing and business arrangements in the healthcare industry are subject to extensive laws and regulations intended to prevent fraud, misconduct, kickbacks, self-dealing and other abusive practices. Additionally, laws regarding data privacy and security, including the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009, or HITECH, as well as comparable laws in non-U.S. jurisdictions, may impose obligations with respect to safeguarding the privacy, use, security and transmission of individually identifiable health information such as genetic material.

Various laws and regulations may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, sales commission, customer incentive programs and other business arrangements. Any misconduct could also involve the improper use of information obtained in the course of clinical studies, which could result in regulatory sanctions and cause serious harm to our reputation. We have adopted a code of conduct applicable to all of our employees, which will be effective as of the effectiveness of the registration statement of which this prospectus forms a part, but it is not always possible to identify and deter employee misconduct, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to comply with these laws or regulations. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business, including the imposition of significant fines or other sanctions.

A variety of risks associated with international operations could materially adversely affect our business.

Glybera has been approved for commercial sale in the EU by the EMA. Our collaborator for TV-45070, Teva, is based in Israel and a significant portion of the research and development activities under our collaboration with Teva are performed outside of North America. If we continue to engage in significant cross-border activities, we will be subject to risks related to international operations, including:

- different regulatory requirements for maintaining approval of drugs and biologics in foreign countries;
- reduced protection for intellectual property rights in certain countries;
- unexpected changes in tariffs, trade barriers and regulatory requirements;
- economic weakness, including inflation, political instability or open conflict in particular foreign economies and markets;
- compliance with tax, employment, immigration and labor laws for employees living or traveling abroad;
- foreign currency fluctuations, which could result in increased operating expenses and reduced revenue, and other obligations incident to doing business in another country;
- workforce uncertainty in countries where labor unrest is more common than in North America;
- tighter restrictions on privacy and the collection and use of data, including genetic material, may apply in jurisdictions outside of North America, where we find some of the families with individuals that exhibit the severe phenotypes that we study; and
- business interruptions resulting from geopolitical actions, including war and terrorism, or natural disasters including earthquakes, typhoons, floods and fires.

If any of these issues were to occur, our business could be materially harmed.

U.S. Holders of our shares may suffer adverse tax consequences if we are characterized as a passive foreign investment company.

Generally, for any taxable year in which 75% or more of our gross income is passive income, or at least 50% of the average quarterly value of our assets (which may be determined in part by the market value of our common shares, which is subject to change) are held for the production of, or produce, passive income, we would be characterized as a passive foreign investment company, or PFIC, for U.S. federal income tax purposes. Based on the composition of our gross income and gross assets and the nature of our business, we do not believe that we were a PFIC for the taxable year ended December 31, 2013 and we do not expect to be a PFIC following this offering and for the taxable year ending December 31, 2014.

If we are a PFIC for 2014 or any subsequent year, U.S. Holders (as defined in “United States & Canadian Income Tax Considerations—U.S. Federal Income Tax Information for U.S. Holders”) of our common shares may suffer adverse tax consequences. Gains realized by non-corporate U.S. Holders on the sale of our common shares would be taxed as ordinary income, rather than as capital gain, and the preferential tax rate applicable to dividends received on our common shares would be lost. Interest charges would also be added to taxes on gains and dividends realized by all U.S. Holders.

A U.S. Holder may avoid these adverse tax consequences by timely making a qualified electing fund election. For each year that we would meet the PFIC gross income or asset test, an electing U.S. Holder would be required to include in gross income its pro rata share of our net ordinary income and net capital gains, if any. A U.S. Holder may make a qualified electing fund election only if we commit to provide U.S. Holders with their pro rata share of our net ordinary income and net capital gains. If we are a PFIC in the current or a future tax year, we will provide our U.S. Holders with the information that is necessary in order for them to make a qualified electing fund election and to report their common shares of ordinary earnings and net capital gains for each year for which we are a PFIC.

A U.S. Holder may also mitigate the adverse tax consequences if we are a PFIC by timely making a mark-to-market election. Generally, for each year that we would meet the PFIC gross income or asset test, an electing U.S. Holder would include in gross income the increase in the value of its shares during each of its taxable years and deduct from gross income the decrease in the value of such shares during each of its taxable years. A mark-to-market election may be made and maintained only if our common shares are regularly traded on a qualified exchange, including The NASDAQ Global Market, or NASDAQ. Whether our common shares are regularly traded on a qualified exchange is an annual determination based on facts that, in part, are beyond our control. Accordingly, a U.S. Holder might not be eligible to make a mark-to-market election to mitigate the adverse tax consequences if we are characterized as a PFIC. See “United States and Canadian Income Tax Considerations—U.S. Federal Income Tax Information for U.S. Holders—Passive Foreign Investment Company Consequences.”

Acquisitions or joint ventures could disrupt our business, cause dilution to our shareholders and otherwise harm our business.

We actively evaluate various strategic transactions on an ongoing basis and may acquire other businesses, products or technologies as well as pursue strategic alliances, joint ventures or investments in complementary businesses. Any of these transactions could be material to our financial condition and operating results and expose us to many risks, including:

- disruption in our relationships with collaborators or suppliers as a result of such a transaction;
- unanticipated liabilities related to acquired companies;
- difficulties integrating acquired personnel, technologies and operations into our existing business;
- retention of key employees;
- diversion of management time and focus from operating our business to management of strategic alliances or joint ventures or acquisition integration challenges;
- increases in our expenses and reductions in our cash available for operations and other uses; and
- possible write-offs or impairment charges relating to acquired businesses.

Foreign acquisitions involve unique risks in addition to those mentioned above, including those related to integration of operations across different cultures and languages, currency risks and the particular economic, political and regulatory risks associated with specific countries.

Also, the anticipated benefit of any strategic alliance, joint venture or acquisition may not materialize. Future acquisitions or dispositions could result in potentially dilutive issuances of our equity securities, the incurrence of debt, contingent liabilities or amortization expenses or write-offs of goodwill, any of which could harm our financial condition. We cannot predict the number, timing or size of future joint ventures or acquisitions, or the effect that any such transactions might have on our operating results.

Risks Related to Development, Clinical Testing and Regulatory Approval of Our Product Candidates

The regulatory approval processes of the FDA, EMA and regulators in other jurisdictions are lengthy, time-consuming and inherently unpredictable. If we, or our collaborators, are unable to obtain timely regulatory approval for our product candidates, our business will be substantially harmed.

The regulatory approval process is expensive and the time required to obtain approval from the FDA, EMA or other regulatory authorities in other jurisdictions to sell any product is uncertain and may take years. Whether regulatory approval will be granted is unpredictable and depends upon numerous factors, including the substantial discretion of the regulatory authorities. Approval policies, regulations, or the type and amount of preclinical and clinical data necessary to gain approval may change during the course of a product candidate’s clinical development and may vary among jurisdictions. Other than for Glybera in the EU, neither we nor our collaborators have obtained regulatory approval for any of our product candidates. It is possible that none of our existing product candidates or any of our future product candidates will ever obtain regulatory approval, even if we expend substantial time and resources seeking such approval.

Our product candidates could fail to receive regulatory approval for many reasons, including the following:

- the FDA, EMA or other regulatory authorities may disagree with the design or implementation of our or our collaborators’ clinical trials;
- we or our collaborators may be unable to demonstrate to the satisfaction of the FDA, EMA or other regulatory authorities that a product candidate is safe and effective for its proposed indication;
- the results of clinical trials may not meet the level of statistical significance required by the FDA, EMA or other regulatory authorities for approval;

- we, or our collaborators, may be unable to demonstrate that a product candidate's clinical and other benefits outweigh its safety risks;
- the FDA, EMA or other regulatory authorities may disagree with our or our collaborators' interpretation of data from preclinical studies or clinical trials;
- the data collected from clinical trials of our product candidates may not be sufficient to support the submission of a New Drug Application, or NDA, or other submission or to obtain regulatory approval in the U.S. or elsewhere;
- the FDA, EMA or other regulatory authorities may fail to approve the manufacturing processes or facilities of third-party manufacturers with which we or our collaborators contract for clinical and commercial supplies; and
- the approval policies or regulations of the FDA, EMA or other regulatory authorities outside of the U.S. may significantly change in a manner rendering our or our collaborators' clinical data insufficient for approval.

Even if we, or our collaborators, obtain approval for a particular product, regulatory authorities may grant approval contingent on the performance of costly post-approval clinical trials, or may approve a product with a label that does not include the labeling claims necessary or desirable for the successful commercialization of that product.

Clinical drug development involves a lengthy and expensive process with uncertain timelines and uncertain outcomes. If clinical trials are prolonged or delayed, we, or our collaborators, may be unable to commercialize our product candidates on a timely basis.

Clinical testing of product candidates is expensive and, depending on the stage of development, can take a substantial period of time to complete. Clinical trial outcomes are inherently uncertain, and failure can occur at any time during the clinical development process.

Clinical trials can be halted or delayed for a variety of reasons, including those related to:

- side effects or adverse events in study participants presenting an unacceptable safety risk;
- inability to reach agreement with prospective contract research organizations, or CROs, and clinical trial sites, or the breach of such agreements;
- failure of third-party contractors, such as CROs, or investigators to comply with regulatory requirements;
- delay or failure in obtaining the necessary approvals from regulators or institutional review boards, or IRBs, in order to commence a clinical trial at a prospective trial site, or their suspension or termination of a clinical trial once commenced;
- a requirement to undertake and complete additional preclinical studies to generate data required to support the submission of an NDA;
- inability to enroll sufficient patients to complete a protocol, particularly in orphan diseases;
- difficulty in having patients complete a trial or return for post-treatment follow-up;
- clinical sites deviating from trial protocol or dropping out of a trial;
- problems with drug product or drug substance storage and distribution;
- adding new clinical trial sites;
- our inability to manufacture, or obtain from third parties, adequate supply of drug substance or drug product sufficient to complete our preclinical studies and clinical trials; and
- governmental or regulatory delays and changes in regulatory requirements, policy and guidelines.

The results of any Phase 3 or other pivotal clinical trial may not be adequate to support marketing approval. These clinical trials are lengthy and, with respect to non-orphan indications, usually involve many hundreds to thousands of patients. In addition, if the FDA, EMA or another applicable regulator disagrees with our or our collaborator's choice of the key testing criterion, or primary endpoint, or the results for the primary endpoint are not robust or significant relative to the control group of patients not receiving the experimental therapy, such regulator may refuse to approve our product candidate in the region in which it has jurisdiction. The FDA, EMA or other applicable non-U.S. regulators also may require additional clinical trials as a condition for approving any of these product candidates.

We could also encounter delays if a clinical trial is suspended or terminated by us, by our collaborators, by the IRBs of the institutions in which such trial is being conducted, by any Data Safety Monitoring Board for such trial, or by the

FDA, EMA or other regulatory authorities. Such authorities may impose such a suspension or termination due to a number of factors, including failure to conduct the clinical trial in accordance with regulatory requirements or our clinical protocols, inspection of the clinical trial operations or trial site by the FDA, EMA or other regulatory authorities resulting in the imposition of a clinical hold, product candidate manufacturing problems, unforeseen safety issues or adverse side effects, failure to demonstrate a benefit from using a drug, changes in governmental regulations or administrative actions or lack of adequate funding to continue the clinical trial. In addition, delays can occur due to safety concerns arising from trials or other clinical data regarding another company's product candidate in the same compound class as one of ours.

If we or our collaborators experience delays in the completion of, or termination of, any clinical trial of one of our product candidates, the commercial prospects of the product candidate will be harmed, could shorten the patent protection period during which we may have the exclusive right to commercialize our products and our or our collaborators' ability to commence product sales and generate product revenue from the product will be delayed. In addition, any delays in completing our clinical trials will increase our costs and slow down our product candidate development and approval process. Any of these occurrences may harm our business, financial condition and prospects significantly. In addition, many of the factors that cause, or lead to, a delay in the commencement or completion of clinical trials may also ultimately lead to the denial of regulatory approval of our product candidates.

Our TV-45070 and GDC-0276 product candidates for treatment of pain target novel molecular mechanisms. Regulatory authorities may require more extensive studies of the long-term effects of such product candidates for regulatory approval, which could delay development of our product candidates or our future product candidates based on novel mechanisms.

Our clinical trials may fail to demonstrate adequately the safety and efficacy of our product candidates, which could prevent or delay regulatory approval and commercialization.

Before obtaining regulatory approvals for the commercial sale of our products, we must demonstrate through lengthy, complex and expensive preclinical testing and clinical trials that the product candidate is both safe and effective for use in each target indication. Clinical trials often fail to demonstrate safety and efficacy of the product candidate studied for the target indication. Most product candidates that commence clinical trials are never approved as products.

In the case of our product candidates, we are seeking to develop treatments for diseases for which there is relatively limited clinical experience, and, in some cases our clinical trials use novel end points and measurement methodologies, which adds a layer of complexity to our clinical trials and may delay regulatory approval. In addition, our focus on orphan and niche markets may cause us to select target indications that are in more challenging therapeutic areas. For example, clinical trials for pain, the indication for which TV-45070 is being developed, are inherently difficult to conduct. The primary measure of pain is subjective patient feedback, which can be influenced by factors outside of our control, and can vary widely from day to day for a particular patient, and from patient to patient and site to site within a clinical study. The placebo effect also tends to have a more significant impact on pain trials.

If our product candidates are not shown to be both safe and effective in clinical trials, we will not be able to obtain regulatory approval or commercialize these product candidates and products. In such case, we would need to develop other compounds and conducting associated preclinical testing and clinical trials, as well as the potential need for additional financing, would have a material adverse effect on our business, growth prospects, operating results, financial condition and results of operations.

We may find it difficult to enroll patients in our clinical studies, including for orphan or niche indications, which could delay or prevent clinical studies of our product candidates.

We may not be able to identify, recruit and enroll a sufficient number of patients, or those with required or desired characteristics to achieve diversity in a study, to complete our clinical studies in a timely manner. Patient enrollment for clinical trials for orphan and niche indications and for more prevalent conditions is affected by factors including:

- severity of the disease under investigation;
- design of the study protocol;
- size of the patient population;
- eligibility criteria for the study in question;
- perceived risks and benefits of the product candidate under study;

- proximity and availability of clinical study sites for prospective patients;
- availability of competing therapies and clinical studies;
- efforts to facilitate timely enrollment in clinical studies; and
- patient referral practices of physicians.

The limited patient populations in orphan and niche indications present significant recruitment challenges for clinical trials. For example, studies estimate the prevalence of LPLD to be approximately 1:1,000,000 and the prevalence of primary EM, to be approximately 43,000 patients in the U.S. Primary EM is a condition of EM that is not caused by another disease or disorder. Many of these patients may not be suitable or available for clinical trials. This means that we or our collaborators generally will have to run multi-site and potentially multi-national trials, which can be expensive and require close coordination and supervision. If we experience delays in completing our clinical trials, such delays could result in increased costs, delays in advancing our product development, delays in testing the effectiveness of our technology or termination of the clinical studies altogether.

If we fail to obtain or maintain orphan drug designation or other regulatory exclusivity for some of our product candidates, our competitive position would be harmed.

A product candidate that receives orphan drug designation can benefit from a streamlined regulatory process as well as potential commercial benefits following approval. Currently, this designation provides market exclusivity in the U.S. and the EU for seven years and ten years, respectively, if a product is the first such product approved for such orphan indication. This market exclusivity does not, however, pertain to indications other than those for which the drug was specifically designated in the approval, nor does it prevent other types of drugs from receiving orphan designations or approvals in these same indications. Further, even after an orphan drug is approved, the FDA can subsequently approve a drug with similar chemical structure for the same condition if the FDA concludes that the new drug is clinically superior to the orphan product or a market shortage occurs.

In the EU, orphan exclusivity may be reduced to six years if the drug no longer satisfies the original designation criteria or can be lost altogether if the marketing authorization holder consents to a second orphan drug application or cannot supply enough drug, or when a second applicant demonstrates its drug is “clinically superior” to the original orphan drug. TV-45070 has received both fast track and orphan drug designations for the treatment of EM by the FDA. If we seek orphan drug designations for other indications or in other jurisdictions, such as for TV-45070 in the EU, we may fail to receive such orphan drug designations and, even if we succeed, such orphan drug designations may fail to result in or maintain orphan drug exclusivity upon approval, which would harm our competitive position.

Results of earlier clinical trials may not be predictive of the results of later-stage clinical trials.

The results of preclinical studies and early clinical trials of our product candidates may not be predictive of the results of later-stage clinical trials. Interpretation of results from early, usually smaller, studies that suggest a clinically meaningful response in some patients, requires caution. Results from later stages of clinical trials enrolling more patients may fail to show the desired safety and efficacy results or otherwise fail to be consistent with the results of earlier trials of the same product candidates. Later clinical trial results may not replicate earlier clinical trials for a variety of reasons, including differences in trial design, different trial endpoints (or lack of trial endpoints in exploratory studies), patient population, number of patients, patient selection criteria, trial duration, drug dosage and formulation and lack of statistical power in the earlier studies. These uncertainties are enhanced where the diseases under study lack established clinical endpoints and validated measures of efficacy, as is often the case with orphan diseases for which no drugs have been developed previously. For example, our results for two small exploratory clinical trials for primary EM pain, one using a topical formulation and the other an oral formulation of TV-45070, used novel measures of efficacy assessment. While these studies provided promising results, further larger clinical trials will be necessary to confirm and extend these observations.

Changes in methods of product candidate manufacturing or formulation may result in additional costs or delay.

As product candidates are developed through preclinical to late stage clinical trials towards approval and commercialization, it is common that various aspects of the development program, such as manufacturing methods and formulation, are altered along the way in an effort to optimize processes and results. Such changes carry the risk that they will not achieve these intended objectives. Any of these changes could cause our product candidates to perform differently and affect the results of planned clinical trials or other future clinical trials conducted with the altered materials. This could delay completion of clinical trials, require the conduct of bridging clinical trials or the repetition of one or more clinical trials, increase clinical trial costs, delay approval of our product candidates and/or jeopardize our or our collaborators' ability to commence product sales and generate revenue.

Even if we obtain and maintain approval for our product candidates from one jurisdiction, we may never obtain approval for our product candidates in other jurisdictions, which would limit our market opportunities and adversely affect our business.

Sales of our approved products are, and will be, subject to U.S. and foreign regulatory requirements governing clinical trials and marketing approval, and we plan to seek regulatory approval to commercialize our product candidates in North America, the EU and in additional foreign countries. Clinical trials conducted in one country may not be accepted by regulatory authorities in other countries and regulatory approval in one country does not ensure approval in any other country, while a failure or delay in obtaining regulatory approval in one country may have a negative effect on the regulatory approval process in others. For example, approval in the U.S. by the FDA does not ensure approval by regulatory authorities in other countries or jurisdictions, and approval by one foreign regulatory authority, such as the EMA for Glybera, does not ensure approval by regulatory authorities in other countries, including by the FDA. Approval procedures vary among jurisdictions and can be lengthy and expensive, and involve requirements and administrative review periods different from, and greater than, those in the U.S., including additional preclinical studies or clinical trials. Even if our product candidates are approved, regulatory approval for any product may be withdrawn by the regulatory authorities in a particular jurisdiction.

Even if a product is approved, the FDA or the EMA, as the case may be, may limit the indications for which the product may be marketed, require extensive warnings on the product labeling or require expensive and time-consuming clinical trials or reporting as conditions of approval. In many countries outside the U.S., a product candidate must be approved for reimbursement before it can be approved for sale in that country. In some cases, the price that we intend to charge for a product is also subject to approval.

Regulatory authorities in countries outside of the U.S. and the EMA also have their own requirements for approval of product candidates with which we must comply prior to marketing in those countries. Obtaining foreign regulatory approvals and compliance with such foreign regulatory requirements could result in significant delays, difficulties and costs for us and could delay or prevent the introduction of our current and any future products, in certain countries.

If we fail to receive applicable marketing approvals or comply with the regulatory requirements in international markets, our target market will be reduced and our ability to realize the full market potential of our product candidates will be harmed and our business will be adversely affected.

We work with outside scientists and their institutions in executing our business strategy of developing product candidates using our Extreme Genetics discovery platform. These scientists may have other commitments or conflicts of interest, which could limit our access to their expertise and harm our ability to leverage our discovery platform.

We work with scientific advisors and collaborators at academic research institutions in connection with our Extreme Genetics discovery platform. These scientific advisors serve as our link to the various families with extreme phenotypes in that these advisors may:

- identify families as potential candidates for study;
- obtain their consent to participate in our research;
- perform medical examinations and gather medical histories;
- conduct the initial analysis of suitability of the families to participate in our research based on the foregoing; and
- collect data and biological samples from the family members periodically in accordance with our study protocols.

These scientists and collaborators are not our employees, rather they serve as either independent contractors or the primary investigators under research collaboration agreements that we have with their sponsoring academic or research institution. Such scientists and collaborators may have other commitments that would limit their availability to us. Although our scientific advisors generally agree not to do competing work, if an actual or potential conflict of interest between their work for us and their work for another entity arises, we may lose their services. It is also possible that some of our valuable proprietary knowledge may become publicly known through these scientific advisors if they breach their confidentiality agreements with us, which would cause competitive harm to our business.

Risks Related to Commercialization

If, in the future, we are unable to establish our own sales, marketing and distribution capabilities or enter into licensing or collaboration agreements for these purposes, we may not be successful in independently commercializing any future products.

We do not have a sales or marketing infrastructure and, as a company, have no sales, marketing or distribution experience. Our strategy involves, in part, building our own commercial infrastructure to selectively commercialize future products in niche or orphan indications. Where we believe such involvement would advance our business, we seek to retain the right to participate in the future development and commercialization of such products. For example, we have a co-promotion option for TV-45070 with Teva in the U.S.

To develop internal sales, distribution and marketing capabilities, we will have to invest significant amounts of financial and management resources, some of which will need to be committed prior to any confirmation that any of our proprietary product candidates will be approved. For any future products for which we decide to perform sales, marketing and distribution functions ourselves, we could face a number of additional risks, including:

- our inability to recruit and retain adequate numbers of effective sales and marketing personnel to or develop alternative sales channels;
- the inability of sales personnel to obtain access to physicians or persuade adequate numbers of physicians to prescribe any future products;
- the lack of complementary products to be offered by sales personnel, which may put us at a competitive disadvantage relative to companies with more extensive product lines; and
- unforeseen costs and expenses associated with creating and maintaining an independent sales and marketing organization.

Where and when appropriate, we may elect to utilize contract sales forces or distribution partners to assist in the commercialization of our product candidates. If we enter into arrangements with third parties to perform sales, marketing and distribution services for a product, the resulting revenue or the profitability from this revenue to us is likely to be lower than if we had sold, marketed and distributed that product ourselves. In addition, we may not be successful in entering into arrangements with third parties to sell, market and distribute our product candidates or may be unable to do so on terms that are favorable to us. We likely will have little control over such third parties, and any of these third parties may fail to devote the necessary resources and attention to sell, market and distribute our current or any future products effectively.

Even if we receive regulatory approval to commercialize any of the product candidates that we develop independently, we will be subject to ongoing regulatory obligations and continued regulatory review, which may result in significant additional expense.

Any regulatory approvals that we receive for our product candidates we commercialize will be subject to limitations on the approved indicated uses for which the product may be marketed or subject to certain conditions of approval, and may contain requirements for potentially costly post-approval trials, including Phase 4 clinical trials, and surveillance to monitor the safety and efficacy of the marketed product.

For any approved product, we will need to ensure continued compliance with extensive regulations and requirements regarding the manufacturing processes, labeling, packaging, distribution, adverse event reporting, storage, advertising, promotion and recordkeeping for the product. These requirements include submissions of safety and other post-approval information and reports, as well as continued compliance with current good manufacturing practices, or cGMP, and current good clinical practices, or cGCP, for any clinical trials that we or our collaborators conduct post-approval. Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with third-party manufacturers or manufacturing processes, or failure to comply with regulatory requirements, may result in, among other things:

- restrictions on the marketing or manufacturing of the product, withdrawal of the product from the market or voluntary or mandatory product recalls;

- fines, warning letters or holds on any post-approval clinical trials;
- refusal by the FDA, EMA or another applicable regulatory authority to approve pending applications or supplements to approved applications filed by us or our collaborators, or suspension or revocation of product license approvals;
- product seizure or detention, or refusal to permit the import or export of products; and
- injunctions or the imposition of civil or criminal penalties.

Occurrence of any of the foregoing could have a material and adverse effect on our business and results of operations.

If the market opportunities for any product that we or our collaborators develop are smaller than we believe they are, our revenue may be adversely affected and our business may suffer.

We intend to focus our independent product development on treatments for rare diseases. Our projections of both the number of people who have these diseases, as well as the subset of people with these diseases who have the potential to benefit from treatment with our product candidates, are based on estimates. Currently, most reported estimates of the prevalence of these diseases are based on studies of small subsets of the population in specific geographic areas, which are then extrapolated to estimate the prevalence of the diseases in the U.S. or elsewhere. For example, studies estimate the prevalence of LPLD to be approximately 1:1,000,000, the prevalence of primary EM to be approximately 43,000 patients, and the prevalence of Dravet Syndrome, or DS, to be 7,500-15,000 patients in the U.S. These estimates may prove to be incorrect. If the prevalence of such diseases is smaller than we have projected, then, even if our products are approved, we may not be able to successfully commercialize them.

Even if we or our collaborators receive approval to commercialize our products, unfavorable pricing regulations and challenging third-party coverage and reimbursement practices could harm our business.

Our or any collaborators' ability to commercialize any products successfully will depend, in part, on the extent to which coverage and reimbursement for these products and related treatments will be available from government healthcare programs, private health insurers, managed care plans, and other organizations. Government authorities and third-party payers, such as private health insurers and health maintenance organizations, decide which medications they will pay for and establish reimbursement levels. A primary trend in the U.S. healthcare industry is cost containment. Government authorities and third-party payors have attempted to control costs by limiting coverage and the amount of reimbursement for particular medications. Increasingly, third-party payors are requiring that drug companies provide them with predetermined discounts from list prices and are challenging the prices charged for medical products. We cannot be sure that coverage and reimbursement will be available for any product that we or any collaborator commercialize and, if reimbursement is available, the level of reimbursement. In addition, coverage and reimbursement may impact the demand for, or the price of, any product candidate for which we or a collaborator obtains marketing approval. If coverage and reimbursement are not available or reimbursement is available only to limited levels, we or our collaborators may not be able to successfully commercialize any product candidate for which marketing approval is obtained.

There may be significant delays in obtaining coverage and reimbursement for newly approved drugs, and coverage may be more limited than the purposes for which the drug is approved by the FDA, EMA or other regulatory authorities. Moreover, eligibility for coverage and reimbursement does not imply that a drug will be paid for in all cases or at a rate that covers our costs, including research, development, manufacture, sale and distribution expenses. Interim reimbursement levels for new drugs, if applicable, may also be insufficient to cover our and any collaborator's costs and may not be made permanent. Reimbursement rates may vary according to the use of the drug and the clinical setting in which it is used, may be based on reimbursement levels already set for lower cost drugs and may be incorporated into existing payments for other services. Net prices for drugs may be reduced by mandatory discounts or rebates required by government healthcare programs or private payers and by any future relaxation of laws that presently restrict imports of drugs from countries where they may be sold at lower prices than in the U.S. Third-party payers often rely upon Medicare coverage policy and payment limitations in setting their own reimbursement policies. Our or any collaborator's inability to promptly obtain coverage and profitable payment rates from both government-funded and private payers for any approved products that we or our collaborators develop could have a material adverse effect on our operating results, our ability to raise capital needed to commercialize products and our overall financial condition.

Our target patient populations in orphan and niche indications, where we intend to selectively develop and commercialize products independently, are relatively small. In order for therapies that are designed to treat smaller patient populations to be commercially viable, the reimbursement for such therapies needs to be higher, on a relative basis, to account for the lack of volume. Accordingly, we will need to implement a coverage and reimbursement strategy for any approved product that accounts for the smaller potential market size. If we are unable to establish or sustain coverage and adequate reimbursement for our current and any future products from third party payers or the government, the adoption of those products and sales revenue will be adversely affected, which, in turn, could adversely affect the ability to market or sell those products.

Recently enacted and future legislation may increase the difficulty and cost for us to commercialize any products that we or our collaborators develop and affect the prices we may obtain.

The U.S. and some foreign jurisdictions are considering or have enacted a number of legislative and regulatory proposals to change the healthcare system in ways that could affect our ability to sell any of our products profitably, once such products are approved for sale. Among policy makers and payers in the U.S. and elsewhere, there is significant interest in promoting changes in healthcare systems with the stated goals of containing healthcare costs, improving quality and/or expanding access. In the U.S., the pharmaceutical industry has been a particular focus of these efforts and has been significantly affected by major legislative initiatives.

In March 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010, collectively, PPACA, was enacted, which includes measures that have significantly changed, or will significantly change, the way healthcare is financed by both governmental and private insurers. Among the provisions of PPACA of importance to the pharmaceutical industry are the following:

- an annual, nondeductible fee on any entity that manufactures or imports certain branded prescription drugs and biologic agents, apportioned among these entities according to their market share in certain government healthcare programs, that began in 2011;
- an increase in the rebates a manufacturer must pay under the Medicaid Drug Rebate Program to 23.1% and 13% of the average manufacturer price for branded and generic drugs, respectively;
- a new Medicare Part D coverage gap discount program, in which manufacturers must agree to offer 50% point-of-sale discounts to negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturer’s outpatient drugs to be covered under Medicare Part D;
- extension of manufacturers’ Medicaid rebate liability to covered drugs dispensed to individuals who are enrolled in Medicaid managed care organizations;
- expansion of eligibility criteria for Medicaid programs by, among other things, allowing states to offer Medicaid coverage to additional individuals and by adding new mandatory eligibility categories for certain individuals with income at or below 133% of the Federal Poverty Level beginning in 2014, thereby potentially increasing manufacturers’ Medicaid rebate liability;
- expansion of the entities eligible for discounts under the Public Health Service pharmaceutical pricing program;
- new requirements under the federal Open Payments program, created under Section 6002 of the PPACA and its implementing regulations that manufacturers of drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid or the Children’s Health Insurance Program (with certain exceptions) report annually to the U.S. Department of Health and Human Services, or HHS, information related to “payments or other transfers of value” made or distributed to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors) and teaching hospitals and that applicable manufacturers and applicable group purchasing organizations report annually to the HHS ownership and investment interests held by physicians (as defined above) and their immediate family members, with data collection required beginning August 1, 2013 and reporting to the Centers for Medicare & Medicaid Services, or CMS, required by March 31, 2014 and by the 90th day of each subsequent calendar year, and disclosure of such information to be made on a publicly available website by September 2014;
- a requirement to annually report drug samples that manufacturers and distributors provide to physicians, effective April 1, 2012;
- expansion of healthcare fraud and abuse laws, including the False Claims Act and the Anti-Kickback Statute, new government investigative powers, and enhanced penalties for noncompliance;

- a licensure framework for follow-on biologic products;
- a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research;
- creation of the Independent Payment Advisory Board which, beginning in 2014, will have authority to recommend certain changes to the Medicare program that could result in reduced payments for prescription drugs and those recommendations could have the effect of law even if Congress does not act on the recommendations; and
- establishment of a Center for Medicare Innovation at CMS to test innovative payment and service delivery models to lower Medicare and Medicaid spending, potentially including prescription drug spending that began on January 1, 2011.

In the EU, similar political, economic and regulatory developments may affect our ability to profitably commercialize our current or any future products. In addition to continuing pressure on prices and cost containment measures, legislative developments at the EU or member state level may result in significant additional requirements or obstacles that may increase our operating costs. In international markets, reimbursement and healthcare payment systems vary significantly by country, and many countries have instituted price ceilings on specific products and therapies. Glybera and our future products, if any, might not be considered medically reasonable and necessary for a specific indication or cost-effective by third-party payors, coverage, an adequate level of reimbursement might not be available for such products and third-party payors' reimbursement policies might adversely affect our or our collaborators' ability to sell Glybera and any future products profitably.

Legislative and regulatory proposals have been made to expand post-approval requirements and restrict sales and promotional activities for pharmaceutical products. We cannot be sure whether additional legislative changes will be enacted, or whether the FDA regulations, guidance or interpretations will be changed, or what the impact of such changes on the marketing approvals of our product candidates, if any, may be. In addition, increased scrutiny by the U.S. Congress of the FDA's approval process may significantly delay or prevent marketing approval, as well as subject us to more stringent product labeling and post-approval testing and other requirements.

We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action, either in the U.S. or abroad. If we or our collaborators are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we or our collaborators are not able to maintain regulatory compliance, our product candidates may lose any marketing approval that may have been obtained and we may not achieve or sustain profitability, which would adversely affect our business.

Foreign governments tend to impose strict price controls, which may adversely affect our future profitability.

In most foreign countries, particularly in those in the EU, prescription drug pricing and/or reimbursement is subject to governmental control. In those countries that impose price controls, pricing negotiations with governmental authorities can take considerable time after the receipt of marketing approval for a product. To obtain reimbursement or pricing approval in some countries, we or our collaborators may be required to conduct a clinical trial that compares the cost-effectiveness of our product candidate to other available therapies.

Some countries require approval of the sale price of a drug before it can be marketed. In many countries, the pricing review period begins after marketing or product licensing approval is granted. In some foreign markets, prescription pharmaceutical pricing remains subject to continuing governmental control even after initial approval is granted. As a result, we or our collaborators might obtain marketing approval for a product in a particular country, but then be subject to price regulations that delay commercial launch of the product, possibly for lengthy time periods, and negatively impact the revenue that are generated from the sale of the product in that country. If reimbursement of such products is unavailable or limited in scope or amount, or if pricing is set at unsatisfactory levels, or if there is competition from lower priced cross-border sales, our profitability will be negatively affected.

Risks Related to Our Dependence on Third Parties

We depend on our collaborative relationship with Teva to further develop and commercialize TV-45070, and if our relationship is not successful or is terminated, we may not be able to effectively develop and/or commercialize TV-45070, which would have a material adverse effect on our business.

We depend on Teva to collaborate with us to develop and globally commercialize TV-45070. Under the agreement, Teva controls all decision-making with respect to the clinical development and commercialization for TV-45070. As a result of our dependence on Teva, the eventual success or commercial viability of TV-45070 is largely beyond our control. The financial returns to us, if any, depend in large part on the achievement of development and commercialization milestones, plus a share of any revenue from sales. Therefore, our success, and any associated financial returns to us and our investors, will depend in large part on Teva's performance under the agreement. We are subject to a number of additional specific risks associated with our dependence on our collaborative relationship with Teva, including:

- adverse decisions by Teva or the Joint Development Committee regarding the development and commercialization of TV-45070;
- possible disagreements as to the timing, nature and extent of our development plans, including clinical trials or regulatory approval strategy;
- loss of significant rights if we fail to meet our obligations under the agreement;
- our limited control over clinical trials of TV-45070;
- changes in key management personnel at Teva, including in members of the Joint Development Committee; and
- possible disagreements with Teva regarding the agreement, for example, with regard to ownership of intellectual property rights.

If either we or Teva fail to perform our respective obligations, any clinical trial, regulatory approval or development progress could be significantly delayed or halted, could result in costly or time-consuming litigation or arbitration and could have a material adverse effect on our business.

Decisions by Teva to emphasize other drug candidates currently in its portfolio ahead of our product candidates, or to add competitive agents to its portfolio could result in a decision to terminate the agreement, in which event, among other things, we may be responsible for paying any remaining costs of all ongoing or future clinical trials.

In addition, Teva's executive offices and a substantial percentage of their manufacturing capabilities are located in Israel. Teva's Israeli operations are dependent upon materials imported from outside Israel, and Teva also exports significant amounts of products from Israel. Accordingly, our collaboration with Teva could be materially and adversely affected by acts of terrorism or if major hostilities were to occur in the Middle East or trade between Israel and its present trading partners were curtailed, including as a result of acts of terrorism in the U.S. or elsewhere.

Any of the above discussed scenarios could adversely affect the timing and extent of our development and commercialization activities, which could cause significant delays and funding shortfalls for those activities and seriously harm our business.

Our prospects for successful development and commercialization of our partnered products and product candidates are dependent upon the research, development and marketing efforts of our collaborators.

We have no control over the resources, time and effort that our collaborators may devote to our programs and limited access to information regarding or resulting from such programs. We are dependent on uniQure, and its licensee Chiesi to successfully commercialize Glybera and on Teva, Genentech, and Merck & Co., Inc., or Merck, to fund and conduct the research and any clinical development of product candidates under our collaboration with each of them, and for the successful regulatory approval, marketing and commercialization of one or more of such products or product candidates. Such success will be subject to significant uncertainty.

Our ability to recognize revenue from successful collaborations may be impaired by multiple factors including:

- a collaborator may shift its priorities and resources away from our programs due to a change in business strategies, or a merger, acquisition, sale or downsizing of its company or business unit;

- a collaborator may cease development in therapeutic areas which are the subject of our strategic alliances;
- a collaborator may change the success criteria for a particular program or product candidate thereby delaying or ceasing development of such program or candidate;
- a significant delay in initiation of certain development activities by a collaborator will also delay payment of milestones tied to such activities, thereby impacting our ability to fund our own activities;
- a collaborator could develop a product that competes, either directly or indirectly, with our current or future products, if any;
- a collaborator with commercialization obligations may not commit sufficient financial or human resources to the marketing, distribution or sale of a product;
- a collaborator with manufacturing responsibilities may encounter regulatory, resource or quality issues and be unable to meet demand requirements;
- a collaborator may exercise its rights under the agreement to terminate our collaboration;
- a dispute may arise between us and a collaborator concerning the research or development of a product candidate or commercialization of a product resulting in a delay in milestones, royalty payments or termination of a program and possibly resulting in costly litigation or arbitration which may divert management attention and resources;
- a collaborator may not adequately protect the intellectual property rights associated with a product or product candidate; and
- a collaborator may use our proprietary information or intellectual property in such a way as to invite litigation from a third party.

If our collaborators do not perform in the manner we expect or fulfill their responsibilities in a timely manner, or at all, the clinical development, regulatory approval and commercialization efforts could be delayed, terminated or be commercially unsuccessful. Conflicts between us and our collaborators may arise. In the event of termination of one or more of our collaboration agreements, it may become necessary for us to assume the responsibility of any terminated product or product candidates at our own expense or seek new collaborators. In that event, we would likely be required to limit the size and scope of one or more of our independent programs or increase our expenditures and seek additional funding which may not be available on acceptable terms or at all, and our business would be materially and adversely affected.

We may not be successful in establishing new collaborations or maintaining our existing alliances, which could adversely affect our ability to develop future product candidates and commercialize future products.

We may seek to enter into additional product collaborations in the future, including alliances with other biotechnology or pharmaceutical companies, to enhance and accelerate the development of our future product candidates and the commercialization of any resulting products. We face significant competition in seeking appropriate collaborators and the negotiation process is time-consuming and complex. Moreover, we may not be successful in our efforts to establish other collaborations or other alternative arrangements for any future product candidates because our research and development pipeline may be insufficient, our product candidates may be deemed to be at too early of a stage of development for collaboration effort and/or third parties may view our product candidates as lacking the requisite potential to demonstrate safety and efficacy. Even if we are successful in our efforts to establish collaborations, the terms that we agree upon may not be favorable to us and we may not be able to maintain such collaborations if, for example, development or approval of a product candidate is delayed or sales of an approved product are disappointing.

If any of our existing collaboration agreements is terminated, or if we determine that entering into other product collaborations is in our best interest but we either fail to enter into, delay in entering into or fail to maintain such collaborations:

- the development of certain of our current or future product candidates may be terminated or delayed;
- our cash expenditures related to development of our product candidates would increase significantly and we may need to seek additional financing sooner than expected;
- we may be required to hire additional employees or otherwise develop expertise, such as clinical, regulatory, sales and marketing expertise, which we do not currently have;

- we will bear all of the risk related to the development of any such product candidates; and
- the competitiveness of any product that is commercialized could be reduced.

We intend to rely on third-party manufacturers to produce our clinical product candidate supplies. Any failure by a third-party manufacturer to produce acceptable supplies for us may delay or impair our ability to initiate or complete our clinical trials or commercialize approved products.

We do not currently own or operate any manufacturing facilities nor do we have any in-house manufacturing experience or personnel. We rely on our collaborators to manufacture product candidates licensed to them or work with multiple third party contract manufacturers to produce sufficient quantities of materials required for the manufacture of our product candidates for preclinical testing and clinical trials and intend to do so for the commercial manufacture of our products. If we are unable to arrange for such third-party manufacturing sources, or fail to do so on commercially reasonable terms, we may not be able to successfully produce, sufficient supply of product candidate or we may be delayed in doing so. Such failure or substantial delay could materially harm our business.

Reliance on third-party manufacturers entails risks to which we would not be subject if we manufactured product candidates ourselves, including reliance on the third party for regulatory compliance and quality control and assurance, volume production, the possibility of breach of the manufacturing agreement by the third party because of factors beyond our control (including a failure to synthesize and manufacture our product candidates in accordance with our product specifications) and the possibility of termination or nonrenewal of the agreement by the third party at a time that is costly or damaging to us. In addition, the FDA, EMA and other regulatory authorities require that our product candidates be manufactured according to cGMP and similar foreign standards. Pharmaceutical manufacturers and their subcontractors are required to register their facilities and/or products manufactured at the time of submission of the marketing application and then annually thereafter with the FDA and certain state and foreign agencies. They are also subject to periodic unannounced inspections by the FDA, state and other foreign authorities. Any subsequent discovery of problems with a product, or a manufacturing or laboratory facility used by us or our collaborators, may result in restrictions on the product or on the manufacturing or laboratory facility, including marketed product recall, suspension of manufacturing, product seizure, or a voluntary withdrawal of the drug from the market. Any failure by our third-party manufacturers to comply with cGMP or failure to scale up manufacturing processes, including any failure to deliver sufficient quantities of product candidates in a timely manner, could lead to a delay in, or failure to obtain, regulatory approval of any of our product candidates.

We rely on third parties to monitor, support, conduct and/or oversee clinical trials of the product candidates that we are developing independently and, in some cases, to maintain regulatory files for those product candidates. We may not be able to obtain regulatory approval for our product candidates or commercialize any products that may result from our development efforts, if we are not able to maintain or secure agreements with such third parties on acceptable terms, if these third parties do not perform their services as required, or if these third parties fail to timely transfer any regulatory information held by them to us.

We rely on entities outside of our control, which may include academic institutions, CROs, hospitals, clinics and other third-party collaborators, to monitor, support, conduct and/or oversee preclinical and clinical studies of our current and future product candidates. We also rely on third parties to perform clinical trials on our current and future product candidates when they reach that stage. As a result, we have less control over the timing and cost of these studies and the ability to recruit trial subjects than if we conducted these trials with our own personnel.

If we are unable to maintain or enter into agreements with these third parties on acceptable terms, or if any such engagement is terminated prematurely, we may be unable to enroll patients on a timely basis or otherwise conduct our trials in the manner we anticipate. In addition, there is no guarantee that these third parties will devote adequate time and resources to our studies or perform as required by our contract or in accordance with regulatory requirements, including maintenance of clinical trial information regarding our product candidates. If these third parties fail to meet expected deadlines, fail to transfer to us any regulatory information in a timely manner, fail to adhere to protocols or fail to act in accordance with regulatory requirements or our agreements with them, or if they otherwise perform in a substandard manner or in a way that compromises the quality or accuracy of their activities or the data they obtain, then clinical trials of our future product candidates may be extended or delayed with additional costs incurred, or our data may be rejected by the FDA, EMA or other regulatory agencies.

Ultimately, we are responsible for ensuring that each of our clinical trials is conducted in accordance with the applicable protocol, legal, regulatory and scientific standards, and our reliance on third parties does not relieve us of our regulatory responsibilities.

We and our CROs are required to comply with cGCP regulations and guidelines enforced by the FDA, the competent authorities of the member states of the EEA and comparable foreign regulatory authorities for products in clinical development. Regulatory authorities enforce these cGCP regulations through periodic inspections of clinical trial sponsors, principal investigators and clinical trial sites. If we or any of our CROs fail to comply with applicable cGCP regulations, the clinical data generated in our clinical trials may be deemed unreliable and our submission of marketing applications may be delayed or the FDA may require us to perform additional clinical trials before approving our marketing applications. Upon inspection, the FDA could determine that any of our clinical trials fail or have failed to comply with applicable cGCP regulations. In addition, our clinical trials must be conducted with product produced under the cGMP regulations enforced by the FDA, and our clinical trials may require a large number of test subjects. Our failure to comply with these regulations may require us to repeat clinical trials, which would delay the regulatory approval process and increase our costs. Moreover, our business may be implicated if any of our CROs violates federal or state fraud and abuse or false claims laws and regulations or healthcare privacy and security laws.

If any of our clinical trial sites terminates for any reason, we may experience the loss of follow-up information on patients enrolled in our ongoing clinical trials unless we are able to transfer the care of those patients to another qualified clinical trial site. Further, if our relationship with any of our CROs is terminated, we may be unable to enter into arrangements with alternative CROs on commercially reasonable terms, or at all.

Switching or adding CROs or other suppliers can involve substantial cost and require extensive management time and focus. In addition, there is a natural transition period when a new CRO or supplier commences work. As a result, delays may occur, which can materially impact our ability to meet our desired clinical development timelines. If we are required to seek alternative supply arrangements, the resulting delays and potential inability to find a suitable replacement could materially and adversely impact our business.

Risks Related to Intellectual Property

We could be unsuccessful in obtaining or maintaining adequate patent protection for one or more of our products or product candidates.

Our commercial success will depend, in large part, on our ability to obtain and maintain patent and other intellectual property protection with respect to our product candidates. Patents might not be issued or granted with respect to our patent applications that are currently pending, and issued or granted patents might later be found to be invalid or unenforceable, be interpreted in a manner that does not adequately protect our current product or any future products, or fail to otherwise provide us with any competitive advantage. The patent position of biotechnology and pharmaceutical companies is generally uncertain because it involves complex legal and factual considerations. The standards applied by the U.S. Patent and Trademark Office, or USPTO, and foreign patent offices in granting patents are not always applied uniformly or predictably. For example, there is no uniform worldwide policy regarding patentable subject matter or the scope of claims allowable in biotechnology and pharmaceutical patents. Consequently, patents may not issue from our pending patent applications. As such, we do not know the degree of future protection that we will have on our proprietary products and technology, if any, and a failure to obtain adequate intellectual property protection with respect to our product candidates and proprietary technology could have a material adverse impact on our business.

Periodic maintenance fees, renewal fees, annuity fees and various other governmental fees on patents and/or applications will be due to be paid to the USPTO and various governmental patent agencies outside of the US in several stages over the lifetime of the patents and/or applications. We employ reputable law firms and other professionals and rely on such third parties to effect payment of these fees with respect to the patents and patent applications that we own, and we rely upon our licensors or our other collaborators to effect payment of these fees with respect to the patents and patent applications that we license. The USPTO and various non-US governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. We employ reputable law firms and other professionals to help us comply with respect to the patents and patent applications that we own, and we rely upon our licensors or our other collaborators to effect compliance with respect to the patents and patent applications that we license. In many cases, an inadvertent lapse can be cured by payment of a late fee or by other means in accordance with the applicable rules. However, there are situations in which noncompliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. In such an event, our competitors might be able to enter the market and this circumstance would have a material adverse effect on our business.

Our intellectual property rights will not necessarily provide us with competitive advantages.

The degree of future protection afforded by our intellectual property rights is uncertain because intellectual property rights have limitations, and may not adequately protect our business, or permit us to maintain our competitive advantage. The following examples are illustrative:

- others may be able to make compounds that are similar to our product candidates but that are not covered by the claims of the patents that we or our collaborators own or have exclusively licensed;
- others may independently develop similar or alternative technologies without infringing our intellectual property rights;
- issued patents that we own or have exclusively licensed may not provide us with any competitive advantages, or may be held invalid or unenforceable, as a result of legal challenges by our competitors;
- we may obtain patents for certain compounds many years before we obtain marketing approval for products containing such compounds, and because patents have a limited life, which may begin to run prior to the commercial sale of the related product, the commercial value of our patents may be limited;
- our competitors might conduct research and development activities in countries where we do not have patent rights and then use the information learned from such activities to develop competitive products for sale in our major commercial markets;
- we may fail to develop additional proprietary technologies that are patentable;
- the laws of certain foreign countries may not protect our intellectual property rights to the same extent as the laws of the U.S., or we may fail to apply for or obtain adequate intellectual property protection in all the jurisdictions in which we operate; and
- the patents of others may have an adverse effect on our business, for example by preventing us from marketing one or more of our product candidates for one or more indications.

Any of the aforementioned threats to our competitive advantage could have a material adverse effect on our business.

We may not be able to protect our intellectual property rights throughout the world.

Filing, prosecuting and defending patents on product candidates in all countries throughout the world would be prohibitively expensive, and our intellectual property rights in some countries outside the U.S. can be less extensive than those in the U.S. In addition, the laws of some foreign countries do not protect intellectual property rights to the same extent as federal and state laws in the U.S. Consequently, we may not be able to prevent third parties from practicing our inventions in all countries outside the U.S., or from selling or importing products made using our inventions in and into the U.S. or other jurisdictions. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products and further, may export otherwise infringing products to territories where we have patent protection, but enforcement is not as strong as that in the U.S. These products may compete with our current or future products, if any, and our patents or other intellectual property rights may not be effective or sufficient to prevent them from competing.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents, trade secrets and other intellectual property protection, particularly those relating to biotechnology products, which could make it difficult for us to stop the infringement of our patents or marketing of competing products in violation of our proprietary rights generally. Proceedings to enforce our patent rights in foreign jurisdictions could result in substantial costs and divert our efforts and attention from other aspects of our business, could put our patents at risk of being invalidated or interpreted narrowly and our patent applications at risk of not issuing and could provoke third parties to assert claims against us. We may not prevail in any lawsuits that we initiate and the damages or other remedies awarded, if any, may not be commercially meaningful. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or license.

Our patents covering one or more of our products or product candidates could be found invalid or unenforceable if challenged.

Any of our intellectual property rights could be challenged or invalidated despite measures we take to obtain patent and other intellectual property protection with respect to our product candidates and proprietary technology. For example, if we were to initiate legal proceedings against a third party to enforce a patent covering one of our product candidates, the defendant could counterclaim that our patent is invalid and/or unenforceable. In patent litigation in the U.S. and in some other jurisdictions, defendant counterclaims alleging invalidity and/or unenforceability are commonplace. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, for example, lack of novelty, obviousness or non-enablement. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld material information from the USPTO or the applicable foreign counterpart, or made a misleading statement, during prosecution. A litigant or the USPTO itself could challenge our patents on this basis even if we believe that we have conducted our patent prosecution in accordance with the duty of candor and in good faith. The outcome following such a challenge is unpredictable.

With respect to challenges to the validity of our patents, for example, there might be invalidating prior art, of which we and the patent examiner were unaware during prosecution. If a defendant were to prevail on a legal assertion of invalidity and/or unenforceability, we would lose at least part, and perhaps all, of the patent protection on a product candidate. Even if a defendant does not prevail on a legal assertion of invalidity and/or unenforceability, our patent claims may be construed in a manner that would limit our ability to enforce such claims against the defendant and others. The cost of defending such a challenge, particularly in a foreign jurisdiction, and any resulting loss of patent protection could have a material adverse impact on one or more of our product candidates and our business.

Enforcing our intellectual property rights against third parties may also cause such third parties to file other counterclaims against us, which could be costly to defend, particularly in a foreign jurisdiction, and could require us to pay substantial damages, cease the sale of certain products or enter into a license agreement and pay royalties (which may not be possible on commercially reasonable terms or at all). Any efforts to enforce our intellectual property rights are also likely to be costly and may divert the efforts of our scientific and management personnel.

Patent protection and patent prosecution for some of our product candidates is dependent on, and the ability to assert patents and defend them against claims of invalidity is maintained by, third parties.

There have been and may be times in the future when certain patents that relate to our product candidates or any approved products are controlled by our licensees or licensors. Although we may, under such arrangements, have rights to consult with our collaborators on actions taken as well as back-up rights of prosecution and enforcement, we have in the past and may in the future relinquish rights to prosecute and maintain patents and patent applications within our portfolio as well as the ability to assert such patents against infringers. Currently, some of these rights relating to the patent portfolios for Glybera, TV-45070, and some of our earlier stage product candidates are held by our collaborators.

If any current or future licensee or licensor with rights to prosecute, assert or defend patents related to our product candidates fails to appropriately prosecute and maintain patent protection for patents covering any of our product candidates, or if patents covering any of our product candidates are asserted against infringers or defended against claims of invalidity or unenforceability in a manner which adversely affects such coverage, our ability to develop and commercialize any such product candidate may be adversely affected and we may not be able to prevent competitors from making, using and selling competing products.

We may be involved in lawsuits to protect or enforce our patents or the patents of our licensors, which could be expensive, time consuming and unsuccessful.

Competitors may infringe our patents or the patents of our licensors. To counter infringement or unauthorized use, we may be required to file infringement claims, which can be expensive and time-consuming. In addition, in an infringement proceeding, a court may decide that a patent of ours or one of our licensors is not valid or is unenforceable, or may refuse to stop the other party in such infringement proceeding from using the technology at issue on the grounds that our patents do not cover the technology in question. An adverse result in any litigation or defense proceedings could put one or more of our patents at risk of being invalidated, held unenforceable or interpreted narrowly, and could put any of our patent applications at risk of not yielding an issued patent.

Interference proceedings, derivation proceedings, entitlement proceedings, ex parte reexamination, inter partes reexamination, inter partes review, post-grant review, and opposition proceedings provoked by third parties or brought by the USPTO or any foreign patent authority may be used to challenge inventorship, ownership, claim scope, or validity of our patent applications. An unfavorable outcome could require us to cease using the related technology or to attempt to license rights to it from the prevailing party. Our business could be harmed if the prevailing party does not offer us a license on commercially reasonable terms, if any license is offered at all. Litigation or interference proceedings may fail and, even if successful, may result in substantial costs and distract our management and other employees.

We may not be able to prevent, alone or with our licensors, misappropriation of our trade secrets or confidential information, particularly in countries where the laws may not protect those rights as fully as in the U.S. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. In addition, there could be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our common shares.

Claims that our product candidates or the sale or use of our future products infringe the patent or other intellectual property rights of third parties could result in costly litigation or could require substantial time and money to resolve, even if litigation is avoided.

Our commercial success depends upon our ability to develop product candidates and commercialize products that may be approved in the future, using our proprietary technology without infringing the intellectual property rights of others. Our product or product candidates or any uses of them may now and in the future infringe third-party patents or other intellectual property rights. Third parties might allege that we or our collaborators are infringing their patent rights or that we have misappropriated their trade secrets, or that we are otherwise violating their intellectual property rights, whether with respect to the manner in which we have conducted our research or to the composition, use or manufacture of the compounds we have developed or are developing with our collaborators. Such third parties might resort to litigation against us or other parties we have agreed to indemnify, which litigation could be based on either existing intellectual property or intellectual property that arises in the future.

It is possible that relevant patents or patent applications held by third parties will cover our product candidates at the time of launch and we may also fail to identify, relevant patents or patent applications held by third parties that cover our product candidates. For example, applications filed before November 29, 2000, and certain applications filed after that date that will not be filed outside the U.S. remain confidential until patents issue. Other patent applications in the U.S. and several other jurisdictions are published approximately 18 months after the earliest filing for which priority is claimed, with such earliest filing date being commonly referred to as the priority date. Furthermore, publication of discoveries in the scientific or patent literature often lags behind actual discoveries. Therefore, we cannot be certain that we or our collaborators were the first to invent, or the first to file patent applications on, our product candidates or for their uses, or that our product candidates will not infringe patents that are currently issued or that are issued in the future. In the event that a third party has also filed a patent application covering one of our product candidates or a similar invention, we may have to participate in an adversarial proceeding, known as an interference, declared by the USPTO or its foreign counterpart to determine priority of invention. Additionally, pending patent applications and patents which have been published can, subject to certain limitations, be later amended in a manner that could cover our current or future products, if any, or their use.

Defending against claims of patent infringement, misappropriation of trade secrets or other violations of intellectual property rights could be costly and time consuming, regardless of the outcome. Thus, even if we were to ultimately prevail, or to settle at an early stage, such litigation could burden us with substantial unanticipated costs. In addition, litigation or threatened litigation could result in significant demands on the time and attention of our management team, distracting them from the pursuit of other company business. Claims that our product candidates or the sale or use of our future products infringe, misappropriate or otherwise violate third-party intellectual property rights could therefore have a material adverse impact on our business.

Most of our competitors are larger than we are and have substantially greater financial resources. They are, therefore, likely to be able to sustain the costs of complex intellectual property litigation longer than we could. In addition, the uncertainties associated with litigation could have a material adverse effect on our ability to raise the funds necessary to conduct our clinical trials, continue our internal research programs, in-license needed technology, or enter into strategic collaborations that would help us bring our product candidates to market.

In addition, any future intellectual property litigation, interference or other administrative proceedings will result in additional expense and distraction of our personnel. An adverse outcome in such litigation or proceedings may expose us or any future strategic collaborators to loss of our proprietary position, expose us to significant liabilities, or require us to seek licenses that may not be available on commercially acceptable terms, if at all, each of which could have a material adverse effect on our business.

Unfavorable outcomes in intellectual property litigation could limit our research and development activities and/or our ability to commercialize certain products.

If third parties successfully assert their intellectual property rights against us, we might be barred from using certain aspects of our technology, or barred from developing and commercializing certain products. Prohibitions against using certain technologies, or prohibitions against commercializing certain products, could be imposed by a court or by a settlement agreement between us and a plaintiff. In addition, if we are unsuccessful in defending against allegations that we have infringed, misappropriated or otherwise violated patent or other intellectual property rights of others, we may be forced to pay substantial damage awards to the plaintiff. There is inevitable uncertainty in intellectual property litigation and we could lose, even if the case against us is weak or flawed. If litigation leads to an outcome unfavorable to us, we may be required to obtain a license from the intellectual property owner in order to continue our research and development programs or to market any resulting product. It is possible that the necessary license will not be available to us on commercially acceptable terms, or at all. Alternatively, we may be required to modify or redesign our current or future products, if any, in order to avoid infringing or otherwise violating third-party intellectual property rights. This may not be technically or commercially feasible, may render those products less competitive, or may delay or prevent the entry of those products to the market. Any of the foregoing could limit our research and development activities, our ability to commercialize one or more product candidates, or both.

In order to avoid or settle potential claims with respect to any patent or other intellectual property rights of third parties, we may choose or be required to seek a license from a third party and be required to pay license fees or royalties or both, which could be substantial. These licenses may not be available on acceptable terms, or at all. Even if we or any future collaborators were able to obtain a license, the rights may be nonexclusive, which could result in our competitors gaining access to the same intellectual property. Ultimately, we could be prevented from commercializing a product, or be forced, by court order or otherwise, to cease some or all aspects of our business operations, if, as a result of actual or threatened patent or other intellectual property claims, we are unable to enter into licenses on acceptable terms. Further, we could be found liable for significant monetary damages as a result of claims of intellectual property infringement. For example, we have received, and may in the future receive, offers to license and demands to license from third parties claiming that we are infringing their intellectual property or owe license fees and, even if such claims are without merit, we could fail to successfully avoid or settle such claims.

If Teva, uniQure, Genentech or Merck license or otherwise acquire rights to intellectual property controlled by a third party in various circumstances, for example, where a product could not be legally developed or commercialized in a country without the third-party intellectual property right or, where it is decided that it would be useful to acquire such third-party right to develop or commercialize the product, they are eligible under our collaboration agreements to decrease payments payable to us on a product-by-product basis and, in certain cases, on a country-by-country basis. Any of the foregoing events could harm our business significantly.

If we breach any of the agreements under which we license the use, development and commercialization rights to our product candidates or technology from third parties, we could lose license rights that are important to our business.

The patent portfolio for Glybera is in-licensed from UBC. Under our existing license agreements, we are subject to various obligations, including diligence obligations such as development and commercialization obligations, as well as potential royalty payments and other obligations. If we fail to comply with any of these obligations or otherwise breach our license agreements, our licensing partners may have the right to terminate the applicable license in whole or in part. Generally, the loss of any one of our current licenses, or any other license we may acquire in the future, could materially harm our business, prospects, financial condition and results of operations.

Confidentiality agreements with employees and third parties may not prevent unauthorized disclosure of trade secrets and other proprietary information, which would harm our competitive position.

In addition to patents, we rely on trade secrets, technical know-how and proprietary information concerning our Extreme Genetics discovery platform, business strategy and product candidates in order to protect our competitive position, which are difficult to protect. In the course of our research and development activities and our business activities, we often rely on confidentiality agreements to protect our proprietary information. Such confidentiality agreements are used, for example, when we talk to vendors of laboratory or clinical development services or potential strategic collaborators. In addition, each of our employees and consultants is required to sign a confidentiality agreement and invention assignment agreement upon joining our company. Our employees, consultants, contractors, business partners or outside scientific collaborators might intentionally or inadvertently disclose our trade secret information in breach of these confidentiality agreements or our trade secrets may otherwise be misappropriated. Our collaborators might also have rights to publish data and we might fail to apply for patent protection prior to such publication. It is possible that a competitor will make use of such information, and that our competitive position will be compromised. In addition, to the extent that our employees, consultants or contractors use intellectual property owned by others in their work for us, disputes may arise as to the rights in related or resulting know-how and inventions. Enforcing a claim that a third party illegally obtained and is using any of our trade secrets is expensive and time consuming, and the outcome is unpredictable. In addition, courts outside the U.S. sometimes are less willing than U.S. courts to protect trade secrets. Moreover, our competitors may independently develop equivalent knowledge, methods and know-how. If we cannot maintain the confidentiality of our proprietary technology and other confidential information, then our ability to obtain patent protection or to protect our trade secret information would be jeopardized, which would adversely affect our competitive position.

Patent reform legislation and recent court decisions could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents.

On September 16, 2011, the Leahy-Smith America Invents Act, or the Leahy-Smith Act, was signed into law. The Leahy-Smith Act includes a number of significant changes to U.S. patent law, including provisions that affect the way patent applications will be prosecuted and may also affect patent litigation. The USPTO has and continues to develop and implement regulations and procedures to govern administration of the Leahy-Smith Act, and many of the substantive changes to patent law associated with the Leahy-Smith Act. The full effect of these changes are currently unclear as the USPTO has not yet adopted all pertinent final rules and regulations, the courts have yet to address these provisions and the applicability of the Leahy-Smith Act and new regulations on specific patents, including our patents discussed herein, have not been determined and would need to be reviewed. Accordingly, it is not yet clear what, if any, impact the Leahy-Smith Act will have on the operation of our business. As a result, the Leahy-Smith Act and its implementation could increase the uncertainties and costs surrounding the prosecution of patent applications and the enforcement or defense of issued patents, all of which could have a material adverse effect on our business and financial condition. On June 13, 2013, the U.S. Supreme Court decision in *Association for Molecular Pathology v. Myriad Genetics, Inc.*, held that isolated DNA sequences are not patentable. As a consequence of the *Myriad* decision, if any of our future product candidates utilize isolated human DNA as a result of our Extreme Genetics discovery platform that allows us to identify DNA sequences associated with human disease, we will not be able to obtain patents in the U.S. claiming such novel gene targets that we discover, which could limit our ability to prevent third parties from developing drugs directed against such targets.

If we do not obtain protection under the Hatch-Waxman Act and similar legislation outside of the U.S. by extending the patent terms for our product candidates, our business may be materially harmed.

Depending upon the timing, duration and specifics of FDA marketing approval of our product candidates, if any, one or more U.S. patents may be eligible for limited patent term restoration under the Hatch-Waxman Act. The Hatch-Waxman Act permits a patent restoration term of up to five years as compensation for patent term lost during clinical testing of the product and the subsequent FDA regulatory review process. However, we may not be granted an extension because of, for example, failing to apply within applicable deadlines, failing to apply prior to expiration of relevant patents or otherwise failing to satisfy applicable requirements. Moreover, the applicable time period or the scope of patent protection afforded could be less than we request.

If we are unable to obtain patent term extension or restoration or the term of any such extension is less than we request, the period during which we will have the right to exclusively market our product will be shortened and our competitors may obtain approval of competing products following our patent expiration, and our revenue could be reduced, possibly materially.

We have not registered our corporate name as a trademark in all of our potential markets, and failure to secure those registrations could adversely affect our business.

Our corporate name, Xenon, has not been trademarked in each market where we operate and plan to operate. Our trademark applications for our corporate name or the name of our products may not be allowed for registration, and our registered trademarks may not be maintained or enforced. During trademark registration proceedings, we may receive rejections, which we may be unable to overcome in our responses. Third parties may also attempt to register trademarks utilizing the Xenon name on their products, and we may not be successful in preventing such usage. In addition, in the USPTO and in comparable agencies in many foreign jurisdictions, third parties are given an opportunity to oppose pending trademark applications and to seek to cancel registered trademarks. Opposition or cancellation proceedings may be filed against our trademarks, and our trademarks may not survive such proceedings. If we do not secure registrations for our trademarks, we may encounter more difficulty in enforcing them against third parties than we otherwise would.

Intellectual property litigation may lead to unfavorable publicity that harms our reputation and causes the market price of our common shares to decline.

During the course of any intellectual property litigation, there could be public announcements of the initiation of the litigation as well as results of hearings, rulings on motions, and other interim proceedings in the litigation. If securities analysts or investors regard these announcements as negative, the perceived value of our existing products, programs or intellectual property could be diminished. Accordingly, the market price of our common shares may decline. Such announcements could also harm our reputation or the market for our future products, which could have a material adverse effect on our business.

Risks Related to Our Industry

If product liability lawsuits are brought against us, we may incur substantial liabilities and may be required to limit commercialization of our current and any future products.

We face an inherent risk of product liability as a result of the clinical testing of our product candidates, and we will face an even greater risk if we commercialize any product candidates. For example, we may be sued if any of our product candidates, including any that are developed in combination therapies, allegedly causes injury or is found to be otherwise unsuitable during product testing, manufacturing, marketing or sale. Any such product liability claims may include allegations of defects in manufacturing, defects in design, a failure to warn of dangers inherent in the product, negligence, strict liability and a breach of warranties. Claims could also be asserted under state consumer protection acts. If we cannot successfully defend ourselves against product liability claims, we may incur substantial liabilities or be required to limit commercialization of our product candidates. Even successful defense would require significant financial and management resources. There is also risk that third parties we have agreed to indemnify could incur liability. Regardless of the merits or eventual outcome, liability claims may result in:

- decreased demand for our product candidates or any resulting products;
- injury to our reputation;
- withdrawal of clinical trial participants;
- costs to defend the related litigation;
- a diversion of management’s time and our resources;
- substantial monetary awards to trial participants or patients;
- product recalls, withdrawals or labeling, marketing or promotional restrictions;
- loss of revenue;
- the inability to commercialize our product candidates; and
- a decline in our share price.

We currently carry product liability insurance of $5,000,000 per occurrence and $5,000,000 aggregate limit. We believe our product liability insurance coverage is appropriate in light of our current clinical programs; however, we may not be able to maintain insurance coverage at a reasonable cost or in sufficient amounts to protect us against losses due to liability. If and when we obtain marketing approval for product candidates, we intend to expand our insurance coverage to include the sale of commercial products; however, we may then be unable to obtain product liability insurance on commercially reasonable terms or in adequate amounts. On occasion, large judgments have been awarded in class action lawsuits based on drugs or medical treatments that had unanticipated adverse effects. A successful product liability claim or series of claims brought against us could cause our common share price to decline and, if judgments exceed our insurance coverage, could adversely affect our future results of operations and business.

Patients with the diseases targeted by our product candidates are often already in severe and advanced stages of disease and have both known and unknown significant pre-existing and potentially life-threatening conditions. During the course of treatment, patients may suffer adverse events, including death, for reasons that may be related to our product candidates. Such events could subject us to costly litigation, require us to pay substantial amounts of money to injured patients, delay, negatively impact or end our opportunity to receive or maintain regulatory approval to market those product candidates, or require us to suspend or abandon our commercialization efforts. Even in a circumstance in which we do not believe that an adverse event is related to our products, the investigation into the circumstance may be time-consuming or inconclusive. These investigations may interrupt our sales efforts, delay our regulatory approval process in other countries, or impact and limit the type of regulatory approvals our product candidates receive or maintain. As a result of these factors, a product liability claim, even if successfully defended, could have a material adverse effect on our business, financial condition or results of operations.

Our current and future relationships with customers and third-party payers in the U.S. and elsewhere will be subject, directly or indirectly, to applicable federal and state anti-kickback, fraud and abuse, false claims, transparency, health information privacy and security, and other healthcare laws and regulations, which could expose us to criminal sanctions, civil penalties, contractual damages, reputational harm, administrative burdens, and diminished profits and future earnings.

Healthcare providers, physicians and third-party payors in the U.S. and elsewhere play a primary role in the recommendation and prescription of any product candidates for which we obtain marketing approval. Our future arrangements with third-party payors and customers may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations, including, without limitation, the federal Anti-Kickback Statute and the federal False Claims Act, that may constrain the business or financial arrangements and relationships through which we market, sell and distribute any products for which we obtain marketing approval. In addition, we may be subject to transparency laws and patient privacy regulation by the federal government and by the U.S. states and foreign jurisdictions in which we conduct our business. The applicable federal, state and foreign healthcare laws and regulations that may affect our ability to operate include the following:

- the federal Anti-Kickback Statute, which prohibits, among other things, persons from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in cash or in kind, to induce or reward either the referral of an individual for, or the purchase, order or recommendation of, any good or service for which payment may be made under federal and state healthcare programs such as Medicare and Medicaid;
- federal civil and criminal false claims laws and civil monetary penalty laws, including the federal False Claims Act, which impose criminal and civil penalties, including civil whistleblower or *qui tam* actions, against individuals or entities for knowingly presenting, or causing to be presented, to the federal government, including the Medicare and Medicaid programs, or other third party payers claims for payment that are false or fraudulent or making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government;
- HIPAA, which imposes criminal and civil liability for executing a scheme to defraud any healthcare benefit program and making false statements relating to healthcare matters;
- HIPAA, as amended by HITECH, and their respective implementing regulations, which impose obligations on covered healthcare providers, health plans, and healthcare clearinghouses, as well as their business associates that create, receive, maintain, or transmit individually identifiable health information for or on behalf of a covered entity, with respect to safeguarding the privacy, security and transmission of individually identifiable health information;

- the federal Open Payments program, created under Section 6002 of PPACA and its implementing regulations requires manufacturers of drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program (with certain exceptions) to report annually to HHS information related to "payments or other transfers of value" made to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors) and teaching hospitals, and applicable manufacturers and applicable group purchasing organizations to report annually to HHS ownership and investment interests held by physicians (as defined above) and their immediate family members, with data collection required beginning August 1, 2013, reporting to the Centers for Medicare & Medicaid Services, or CMS, required by March 31, 2014 (and by the 90th day of each subsequent calendar year), and disclosure of such information to be made on a publicly available website by September 2014; and
- analogous state and foreign laws and regulations, such as state anti-kickback and false claims laws, which may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payers, including private insurers; state and foreign laws that require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government or otherwise restrict payments that may be made to healthcare providers; state and foreign laws that require drug manufacturers to report information related to payments to physicians and other healthcare providers or marketing expenditures; and state and foreign laws governing the collection, export, privacy, use and security of biological materials and health information in certain circumstances, many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts.

Efforts to ensure that our business arrangements with third parties will comply with applicable healthcare laws and regulations may involve substantial costs. It is possible that governmental authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our operations are found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to significant civil, criminal and administrative penalties, including, without limitation, damages, fines, imprisonment, exclusion from participation in government healthcare programs, such as Medicare and Medicaid, and the curtailment or restructuring of our operations, which could have a material adverse effect on our business. If any of the physicians or other providers or entities with whom we expect to do business, including our collaborators, is found not to be in compliance with applicable laws, it may be subject to criminal, civil or administrative sanctions, including exclusions from participation in government healthcare programs, which could also materially affect our business.

If we fail to comply with environmental, health and safety laws and regulations, we could become subject to fines or penalties or incur costs that could have a material adverse effect on the success of our business.

Our research and development activities involve the controlled use of potentially harmful biological materials as well as hazardous materials, chemicals, and various radioactive compounds typically employed in molecular and cellular biology. For example, we routinely use cells in culture and we employ small amounts of radioisotopes. We cannot completely eliminate the risk of accidental contamination or injury from the use, storage, handling, or disposal of these materials through our maintenance of up-to-date licensing and training programs. In the event of contamination or injury, we could be held liable for damages that result, and any liability could exceed our resources. We currently carry insurance covering certain claims arising from our use of these materials. However, if we are unable to maintain our insurance coverage at a reasonable cost and with adequate coverage, our insurance may not cover any liability that may arise. We are subject to U.S. and Canadian federal, provincial, and local laws and regulations governing the use, storage, handling, and disposal of these materials and specified waste products. Complying with regulations regarding the use of these materials could be costly, and if we fail to comply with these regulations, it could have a material adverse effect on our operations and profitability.

We or the third parties upon whom we depend may be adversely affected by earthquakes or other natural disasters and our business continuity and disaster recovery plans may not adequately protect us from serious disaster.

Our headquarters are located in Burnaby, British Columbia, Canada. We are vulnerable to natural disasters such as earthquakes that could disrupt our operations. If a natural disaster, power outage or other event occurred that prevented us from using all or a significant portion of our headquarters, that damaged critical infrastructure, such as the manufacturing facilities of our third-party contract manufacturers, or that otherwise disrupted operations, it may be difficult or, in certain cases, impossible for us to continue our business for a substantial period of time. We do not carry insurance for earthquakes or other natural disasters and although our business interruption insurance applies in the event of an earthquake, we may not carry sufficient business interruption insurance to compensate us for all losses that may occur. The disaster recovery and business continuity plans we have in place currently are limited and are unlikely to prove adequate in the event of a serious disaster or similar event. We may incur substantial expenses as a result of the limited nature of our disaster recovery and business continuity plans, which, particularly when taken together with our lack of earthquake insurance, could have a material adverse effect on our business. In addition, we may lose samples or other valuable data. The occurrence of any of the forgoing could have a material adverse effect on our business.

Risks Related to Our Common Shares and this Offering

Future sales of our common shares in the public market could cause our share price to fall.

Our share price could decline as a result of sales of a large number of our common shares after this offering or the perception that these sales could occur. These sales, or the possibility that these sales may occur, also might make it more difficult for us to sell equity securities in the future at a time and at a price that we deem appropriate.

Holders of approximately 30,786,296 common shares, or   % of our common shares, will have rights to require us to file registration statements covering the sale of their common shares or to include their common shares in registration statements that we may file for ourselves or other shareholders described in the section of the prospectus captioned “Description of Share Capital—Registration Rights.” We also intend to register the offer and sale of all common shares that we may issue under our equity compensation plans. Once we register the offer and sale of common shares for the holders of registration rights and option holders, they can be freely sold in the public market upon issuance, subject to the market stand-off and lock-up agreements described in the sections of this prospectus captioned “Shares Eligible for Future Sale—Lock-Up and Market Standoff Agreements” and “Underwriting.”

In addition, in the future, we may issue additional common shares or other equity or debt securities convertible into common shares in connection with a financing, acquisition, litigation settlement, employee arrangements or otherwise. Any such issuance could result in substantial dilution to our existing shareholders and could cause our common share price to decline.

We expect that our trading price will fluctuate significantly and investors may not be able to resell their shares at or above the initial public offering price.

The trading price of our common shares following this offering may be highly volatile and could be subject to wide fluctuations in response to various factors, some of which are beyond our control. As a result of this volatility, you may not be able to sell your common shares at or above the initial public offering price, if at all. The market price for our common shares may be influenced by many factors, including:

- actions by any of our collaborators regarding our product candidates they are developing, including announcements regarding clinical or regulatory decisions or developments or our collaboration;
- announcements by us or our competitors of new products, product candidates or new uses for existing products, significant contracts, commercial relationships or capital commitments and the timing of these introductions or announcements;
- unanticipated serious safety concerns related to Glybera or to the use of any of our products and product candidates;
- results from or delays of clinical trials of our product candidates;
- failure to obtain or delays in obtaining product approvals or clearances from regulatory authorities;
- adverse regulatory or reimbursement announcements;
- announcements by us or our competitors of significant acquisitions, strategic collaborations, joint ventures or capital commitments;
- the results of our efforts to discover or develop additional product candidates;
- our dependence on third parties, including our collaborators, CROs, clinical trial sponsors and clinical investigators;
- regulatory or legal developments in Canada, the U.S. or other countries;
- developments or disputes concerning patent applications, issued patents or other proprietary rights;

- the recruitment or departure of key scientific or management personnel;
- our ability to successfully commercialize our future product candidates we develop independently, if approved;
- the level of expenses related to any of our product candidates or clinical development programs;
- actual or anticipated changes in estimates as to financial results, development timelines or recommendations by securities analysts;
- actual or anticipated quarterly variations in our financial results or those of our competitors;
- any change to the composition of the board of directors or key personnel;
- expiration of contractual lock-up agreements with our executive officers, directors and security holders;
- sales of common shares by us or our shareholders in the future, as well as the overall trading volume of our common shares;
- changes in the structure of healthcare payment systems;
- commencement of, or our involvement in, litigation;
- general economic, industry and market conditions in the pharmaceutical and biotechnology sectors and other factors that may be unrelated to our operating performance or the operating performance of our competitors, including changes in market valuations of similar companies; and
- the other factors described in this “Risk Factors” section.

In addition, the stock market in general and NASDAQ and the biopharmaceutical industry in particular, have from time to time experienced volatility that often has been unrelated to the operating performance of the underlying companies. These broad market and industry fluctuations may adversely affect the market price of our common shares, regardless of our operating performance. In several recent situations where the market price of a stock has been volatile, holders of that stock have instituted securities class action litigation against the company that issued the stock. If any of our shareholders were to bring a lawsuit against us, the defense and disposition of the lawsuit could be costly and divert the time and attention of our management and harm our operating results.

After this offering, our executive officers, directors and principal shareholders will be able to exert significant influence over matters submitted to shareholders for approval.

Upon the closing of this offering, our executive officers and directors and shareholders who owned more than 5% of our outstanding common shares before this offering will, in the aggregate, own or control shares representing approximately   % of our outstanding common shares. As a result, if these shareholders were to choose to act together, they would be able to exert significant influence over matters submitted to our shareholders for approval, as well as our management and affairs. The interests of this group of shareholders may not always coincide with our corporate interests or the interests of other shareholders, and they may act in a way in which you may not agree with or in a way that may not be in the best interests of other shareholders. This concentration of voting power could delay or prevent an acquisition of our company on terms that other shareholders may desire or otherwise discourage a potential acquirer from attempting to obtain control of us, which in turn could have a material adverse effect on our share price.

Provisions in our corporate charter documents and Canadian law could make an acquisition of us, which may be beneficial to our shareholders, more difficult and may prevent attempts by our shareholders to replace or remove our current management and/or limit the market price of our common shares.

Provisions in our articles and our by-laws that will become effective immediately prior to consummation of this offering, as well as certain provisions under the Canada Business Corporations Act, or CBCA, and applicable Canadian securities laws, may discourage, delay or prevent a merger, acquisition or other change in control of us that shareholders may consider favorable, including transactions in which they might otherwise receive a premium for their common shares. These provisions could also limit the price that investors might be willing to pay in the future for our common shares, thereby depressing the market price of our common shares. In addition, because our board of directors is responsible for appointing the members of our management team, these provisions may frustrate or prevent any attempts by our shareholders to replace or remove our current management by making it more difficult for shareholders to replace members of our board of directors. Among other things, these provisions include the following:

- shareholders cannot amend our articles unless such amendment is approved by shareholders holding at least two-thirds of the shares entitled to vote on such approval;

- our board of directors may, without shareholder approval, issue preferred shares having any terms, conditions, rights, preferences and privileges as the board of directors may determine; and
- shareholders must give advance notice to nominate directors or to submit proposals for consideration at shareholders' meetings.

Any provision in our articles, by-laws, under the CBCA or under any applicable Canadian securities law that has the effect of delaying or deterring a change in control could limit the opportunity for our shareholders to receive a premium for their common shares, and could also affect the price that some investors are willing to pay for our common shares.

U.S. civil liabilities may not be enforceable against us, our directors, our officers or certain experts named in this prospectus.

We are governed by the CBCA and our principal place of business is in Canada. Many of our directors and officers, as well as certain experts named herein, reside outside of the U.S., and all or a substantial portion of their assets as well as all or a substantial portion of our assets are located outside the U.S. As a result, it may be difficult for investors to effect service of process within the U.S. upon us and such directors, officers and experts or to enforce judgments obtained against us or such persons, in U.S. courts, in any action, including actions predicated upon the civil liability provisions of U.S. federal securities laws or any other laws of the U.S. Additionally, rights predicated solely upon civil liability provisions of U.S. federal securities laws or any other laws of the U.S. may not be enforceable in original actions, or actions to enforce judgments obtained in U.S. courts, brought in Canadian courts, including courts in the Province of British Columbia.

We are governed by the corporate laws of Canada which in some cases have a different effect on shareholders than the corporate laws of Delaware, U.S.

We are governed by the CBCA and other relevant laws, which may affect the rights of shareholders differently than those of a company governed by the laws of a U.S. jurisdiction, and may, together with our charter documents, have the effect of delaying, deferring or discouraging another party from acquiring control of our company by means of a tender offer, a proxy contest or otherwise, or may affect the price an acquiring party would be willing to offer in such an instance. The material differences between the CBCA and Delaware General Corporation Law, or DGCL, that may have the greatest such effect include, but are not limited to, the following: (i) for material corporate transactions (such as mergers and amalgamations, other extraordinary corporate transactions or amendments to our articles) the CBCA generally requires a two-thirds majority vote by shareholders, whereas DGCL generally only requires a majority vote; and (ii) under the CBCA a holder of 5% or more of our common shares can requisition a special meeting of shareholders, whereas such right does not exist under the DGCL. Refer to the heading titled "Material Differences between the Canada Business Corporations Act and Delaware General Corporation Law" for more information.

We do not know whether an active and liquid trading market will develop for our common shares or what the market price of our common shares will be and as a result it may be difficult for you to sell your common shares.

Prior to this offering, there has been no public market for our common shares. An active trading market for our shares may never develop or be sustained following this offering, on NASDAQ, on which we intend to apply to have our common shares listed, or otherwise. If an active market for our common shares does not develop, it may be difficult for you to sell common shares you purchase in this offering without depressing the market price for the common shares or you may not be able to sell your shares at all. The initial public offering price for our common shares will be determined through negotiations with the underwriters and the negotiated price may not be indicative of the market price for our common shares after this offering. The initial public offering price may vary from the market price of our common shares after the offering. As a result of these and other factors, you may not be able to sell your common shares at or above the initial public offering price or at all. Further, an inactive market may also impair our ability to raise capital by selling additional common shares and may impair our ability to enter into strategic collaborations or acquire companies or products by using our common shares as consideration.

Complying with the laws and regulations affecting public companies will increase our costs and the demands on management and could harm our operating results and our ability to accurately report our financial condition, results of operations or cash flows, which may adversely affect investor confidence in us and, as a result, the value of our common shares.

As a public company, and particularly after we cease to be an "emerging growth company," we will incur significant legal, accounting and other expenses that we did not incur as a private company. In addition, the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, and the related rules and regulations subsequently implemented by the Securities and Exchange Commission, or SEC, the British Columbia Securities Commission, the Alberta Securities Commission, the Ontario Securities Commission and NASDAQ impose numerous requirements on public companies, including requiring changes in corporate governance practices. Also, the Securities Exchange Act of 1934, as amended, or the Exchange Act, requires, among other things, that we file annual, quarterly and current reports with respect to our business and operating results. In addition, we have recently hired Ian Mortimer as our full-time chief financial officer. We anticipate that we may need to hire additional accounting and financial staff with appropriate public company experience and technical accounting knowledge to address the added burdens of operating as a public company. Our management and other personnel will need to devote a substantial amount of time to compliance with these laws and regulations. These requirements have increased and will continue to increase our legal, accounting, and financial compliance costs and have made and will continue to make some activities more time-consuming and costly. For example, we expect these rules and regulations to make it more difficult and more expensive for us to obtain director and officer liability insurance and we may be required to accept reduced policy limits and coverage or to incur substantial costs to maintain the same or similar coverage. These rules and regulations could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors or our board committees or as executive officers.

The Sarbanes-Oxley Act requires, among other things, that we assess the effectiveness of our internal control over financial reporting annually and the effectiveness of our disclosure controls and procedures quarterly. In particular, commencing with our second annual report on Form 10-K, Section 404 of the Sarbanes-Oxley Act, or Section 404, will require us to perform system and process evaluation and testing of our internal control over financial reporting to allow management to report on, and our independent registered public accounting firm potentially to attest to, the effectiveness of our internal control over financial reporting. As an "emerging growth company" we expect to avail ourselves of the exemption from the requirement that our independent registered public accounting firm attest to the effectiveness of our internal control over financial reporting under Section 404. However, we may no longer avail ourselves of this exemption when we cease to be an "emerging growth company." When our independent registered public accounting firm is required to undertake an assessment of our internal control over financial reporting, the cost of our compliance with Section 404 will correspondingly increase. Our compliance with applicable provisions of Section 404 will require that we incur substantial accounting expense and expend significant management time on compliance-related issues as we implement additional corporate governance practices and comply with reporting requirements. Moreover, if we are not able to comply with the requirements of Section 404 applicable to us in a timely manner, or if we or our independent registered public accounting firm identifies deficiencies in our internal control over financial reporting that are deemed to be material weaknesses, the market price of our common shares could decline and we could be subject to sanctions or investigations by the SEC or other regulatory authorities, which would require additional financial and management resources.

Furthermore, investor perceptions of our company may suffer if deficiencies are found, and this could cause a decline in the market price of our common shares. Irrespective of compliance with Section 404, any failure of our internal control over financial reporting could have a material adverse effect on our stated operating results and harm our reputation. If we are unable to implement these requirements effectively or efficiently, it could harm our operations, financial reporting, or financial results and could result in an adverse opinion on our internal controls from our independent registered public accounting firm.

We are an "emerging growth company," and any decision on our part to comply only with certain reduced reporting and disclosure requirements applicable to emerging growth companies could make our common shares less attractive to investors.

We are an "emerging growth company," as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act. For as long as we continue to be an "emerging growth company," we may choose to take advantage of exemptions from various reporting requirements applicable to other public companies that are not “emerging growth companies,” including, but not limited to, not being required to have our independent registered public accounting firm audit our internal control over financial reporting under Section 404, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and shareholder approval of any golden parachute payments not previously approved. We could be an “emerging growth company” for up to five years following the completion of this offering, although, if we have more than $1.0 billion in annual revenue, if the market value of our common shares held by non-affiliates exceeds $700 million as of June 30 of any year, or we issue more than $1.0 billion of non-convertible debt over a three-year period before the end of that five-year period, we would cease to be an “emerging growth company” as of the following December 31. Investors could find our common shares less attractive if we choose to rely on these exemptions. If some investors find our common shares less attractive as a result of any choices to reduce future disclosure, there may be a less active trading market for our common shares and our share price may be more volatile.

As an “emerging growth company,” the JOBS Act allows us to delay adoption of new or revised accounting pronouncements applicable to public companies until such pronouncements are made applicable to private companies. However, we are choosing to “opt out” of such extended transition period, and as a result, we will comply with new or revised accounting standards on the relevant dates on which adoption of such standards is required for non-emerging growth companies. Section 107 of the JOBS Act provides that our decision to opt out of the extended transition period for complying with new or revised accounting standards is irrevocable.

If we fail to maintain an effective system of internal control over financial reporting, we may not be able to accurately report our financial results or prevent fraud. As a result, shareholders could lose confidence in our financial and other public reporting, which would harm our business and the trading price of our common shares.

Effective internal controls over financial reporting are necessary for us to provide reliable financial reports and, together with adequate disclosure controls and procedures, are designed to prevent fraud. Any failure to implement required new or improved controls, or difficulties encountered in their implementation could cause us to fail to meet our reporting obligations. In addition, any testing by us conducted in connection with Section 404 or any subsequent testing by our independent registered public accounting firm, may reveal deficiencies in our internal controls over financial reporting that are deemed to be material weaknesses or that may require prospective or retroactive changes to our financial statements or identify other areas for further attention or improvement. Inferior internal controls could also cause investors to lose confidence in our reported financial information, which could have a negative effect on the trading price of our common shares.

We will be required to disclose changes made in our internal controls and procedures on a quarterly basis and our management will be required to assess the effectiveness of these controls annually. However, for as long as we are an “emerging growth company” under the JOBS Act, our independent registered public accounting firm will not be required to attest to the effectiveness of our internal controls over financial reporting pursuant to Section 404. We could be an “emerging growth company” for up to five years. An independent assessment of the effectiveness of our internal controls could detect problems that our management’s assessment might not. In addition, our management and independent registered public accounting firm did not perform an evaluation of our internal control over financial reporting as of December 31, 2013, December 31, 2012 or December 31, 2011, in accordance with the provisions of the Sarbanes-Oxley Act. Had we and our independent registered public accounting firm performed such an evaluation, control deficiencies may have been identified by management or our independent registered public accounting firm, and those control deficiencies could have also represented one or more material weaknesses. Undetected material weaknesses in our internal controls could lead to financial statement restatements and require us to incur the expense of remediation.

If you purchase our common shares in this offering, you will incur immediate and substantial dilution in the book value of your shares and future sales and issuances of our common shares or rights to purchase common shares, including pursuant to our equity incentive plans, could cause you to incur additional dilution and could cause our share price to fall.

Investors purchasing common shares in this offering will pay a price per common share that substantially exceeds the net tangible book value per common share as of June 30, 2014. Net tangible book value is our tangible assets after subtracting our liabilities. As a result, investors purchasing common shares in this offering will incur immediate dilution of $ per common share, based on the initial public offering price of $ per common share. Further, investors purchasing common shares in this offering will contribute approximately % of the total amount invested by shareholders since our inception, but will own only approximately % of the common shares outstanding after giving effect to this offering.

This dilution is due to our investors who purchased shares prior to this offering having paid substantially less than the price offered to the public in this offering when they purchased their shares. In addition, as of June 30, 2014, options to purchase 7,013,578 of our common shares with a weighted-average exercise price of $0.90 per common share were outstanding. The exercise of any of these options would result in additional dilution. As a result of the dilution to investors purchasing common shares in this offering, investors may receive significantly less than the purchase price paid in this offering, if anything, in the event of our liquidation. Further, because we will need to raise additional capital to fund our clinical development programs, we may in the future sell substantial amounts of common shares or securities convertible into or exchangeable for common shares. Pursuant to our equity incentive plan(s), our compensation committee (or a subset thereof) is authorized to grant equity-based incentive awards to our employees, directors and consultants. Future option grants and issuances of common shares under our share-based compensation plans may have an adverse effect on the market price of our common shares.

These future issuances of common shares or common share-related securities, together with the exercise of outstanding options and any additional common shares issued in connection with acquisitions, if any, may result in further dilution to our existing shareholders, and new investors could gain rights, preferences and privileges senior to those of holders of our common shares, including common shares sold in this offering.

For a further description of the dilution that you will experience immediately after this offering, see “Dilution.”

Our management team will have broad discretion to use the net proceeds from this offering and its investment of these proceeds may not yield a favorable return. They may invest the proceeds of this offering in ways with which investors disagree.

Our management team will have broad discretion in the application of the net proceeds from this offering and could spend or invest the proceeds in ways with which our shareholders disagree. Accordingly, investors will need to rely on our management team’s judgment with respect to the use of these proceeds. We intend to use the proceeds from this offering to: (1) fund preclinical and early clinical development of our DS and XEN801 programs; (2) genetic research and drug discovery activities using our Extreme Genetics discovery platform; and (3) for working capital and other general corporate purposes. We may also use a portion of the net proceeds to acquire, license and invest in complementary products, technologies or businesses; however, we currently have no agreements or commitments to complete any such transaction. These uses may not yield a favorable return to our shareholders.

We cannot specify with certainty all of the particular uses for the net proceeds to be received upon the closing of this offering. In addition, the amount, allocation and timing of our actual expenditures will depend upon numerous factors, including milestone payments received from our collaborations and royalties received on sale of our approved product and any future approved product. Accordingly, we will have broad discretion in using these proceeds. Until the net proceeds are used, they may be placed in investments that do not produce significant income or that may lose value.

We are at risk of securities class action litigation.

In the past, securities class action litigation has often been brought against a company following a decline in the market price of its securities. This risk is especially relevant for us because biotechnology companies have experienced significant stock price volatility in recent years. If we face such litigation, it could result in substantial costs and a diversion of management’s attention and resources, which could harm our business.

We do not anticipate paying any cash dividends on our common shares in the foreseeable future.

We do not currently intend to pay any cash dividends on our common shares in the foreseeable future. We currently intend to retain all of our future earnings, if any, to finance the growth and development of our business. In addition, the terms of any future debt agreements may preclude us from paying dividends. As a result, capital appreciation, if any, of our common shares may be investors’ sole source of gain for the foreseeable future.

NASDAQ may delist our securities from its exchange, which could limit investors’ ability to make transactions in our securities and subject us to additional trading restrictions.

We intend to apply to list our common shares on NASDAQ. In order to make a final determination of compliance with their listing criteria, NASDAQ may look to the first trading day’s activity and, particularly, the last bid price on such day. In the event the trading price for our common shares drops below NASDAQ's $1.00 minimum bid requirement, NASDAQ could rescind our initial listing approval. If that were to happen, the liquidity for our common shares would decrease. If we failed to list the common shares on NASDAQ, the liquidity for our common shares would be significantly impaired, which may substantially decrease the trading price of our common shares.

In addition, in the future, our securities may fail to meet the continued listing requirements to be listed on NASDAQ. If NASDAQ delists our common shares from trading on its exchange, we could face significant material adverse consequences, including:

- a limited availability of market quotations for our securities;
- a determination that our common shares is a "penny stock" which will require brokers trading in our common shares to adhere to more stringent rules and possibly resulting in a reduced level of trading activity in the secondary trading market for our common shares;
- a limited amount of news and analyst coverage for our company; and
- a decreased ability to issue additional securities or obtain additional financing in the future.

If securities or industry analysts do not publish research reports about our business, or if they issue an adverse opinion about our business, our share price and trading volume could decline.

The trading market for our common shares will be influenced by the research and reports that securities or industry analysts publish about us or our business. Securities and industry analysts do not currently, and may never, publish research on our company. If no or too few securities or industry analysts commence coverage of our company, the trading price for our common shares would likely be negatively impacted. In the event securities or industry analysts initiate coverage, if one or more of the analysts who cover us downgrade our common shares or publish inaccurate or unfavorable research about our business, our share price would likely decline. If one or more of these analysts cease coverage of our company or fail to publish reports on us regularly, demand for our common shares could decrease, which might cause our price and trading volume to decline.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements that are based on management's beliefs and assumptions and on information currently available to management. Some of the statements under "Prospectus Summary," "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Business" and elsewhere in this prospectus contain forward-looking statements. In some cases, you can identify forward-looking statements by the following words: "may," "will," "could," "would," "should," "expect," "intend," "plan," "anticipate," "believe," "estimate," "predict," "project," "potential," "continue," "ongoing" or the negative of these terms or other comparable terminology, although not all forward-looking statements contain these words.

These statements involve risks, uncertainties and other factors that may cause actual results, levels of activity, performance or achievements to be materially different from the information expressed or implied by these forward-looking statements. Although we believe that we have a reasonable basis for each forward-looking statement contained in this prospectus, we caution you that these statements are based on a combination of facts and factors currently known by us and our projections of the future, about which we cannot be certain. Forward-looking statements in this prospectus include, but are not limited to, statements about:

- our ability to identify additional products or product candidates using our Extreme Genetics discovery platform;
- the initiation, timing, cost, progress and success of our research and development programs, preclinical studies and clinical trials;
- our ability to advance product candidates into, and successfully complete, clinical trials;
- our ability to recruit sufficient numbers of patients for our future clinical trials for orphan or more common indications;
- our ability to achieve profitability;
- our ability to obtain funding for our operations, including research funding;
- our ability to receive milestones, royalties and sublicensing fees under our collaborations, and the timing of such payments;
- the implementation of our business model and strategic plans;
- our ability to develop and commercialize product candidates for orphan and niche indications independently;
- our commercialization, marketing and manufacturing capabilities and strategy;
- our ability to find families to support our Extreme Genetics discovery platform;
- our ability to discover genes and drug targets;
- our ability to protect our intellectual property and operate our business without infringing upon the intellectual property rights of others;
- our expectations regarding federal, state and foreign regulatory requirements;
- the therapeutic benefits, effectiveness and safety of our product candidates;
- the accuracy of our estimates of the size and characteristics of the markets that may be addressed by our products and product candidates;
- the rate and degree of market acceptance and clinical utility of Glybera and future products, if any;
- the timing of and our and our collaborators' ability to obtain and maintain regulatory approvals for our product candidates;
- the likelihood of our exercise of our option to co-promote TV-45070 in the U.S. under our Teva collaboration and co-fund and co-develop under our Merck collaboration;
- our ability to maintain and establish collaborations;
- our use of proceeds from this offering;
- our expectations regarding market risk, including interest rate changes and foreign currency fluctuations;
- our belief in the sufficiency of our cash flows to meet our needs for at least the next 12 to 24 months;

- our expectations regarding the timing during which we will be an emerging growth company under the JOBS Act;
- our ability to engage and retain the employees required to grow our business;
- our future financial performance and projected expenditures;
- developments relating to our competitors and our industry, including the success of competing therapies that are or become available; and
- estimates of our expenses, future revenue, capital requirements and our needs for additional financing.

In addition, you should refer to the "Risk Factors" section of this prospectus for a discussion of other important factors that may cause actual results to differ materially from those expressed or implied by the forward-looking statements. As a result of these factors, we cannot assure you that the forward-looking statements in this prospectus will prove to be accurate. Furthermore, if the forward-looking statements prove to be inaccurate, the inaccuracy may be material. In light of the significant uncertainties in these forward-looking statements, you should not regard these statements as a representation or warranty by us or any other person that we will achieve our objectives and plans in any specified time frame, or at all. We undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law. The Private Securities Litigation Reform Act of 1995 and Section 27A of the Securities Act of 1933, as amended, do not protect any forward-looking statements that we make in connection with this offering.

MARKET, INDUSTRY AND OTHER DATA

Unless otherwise indicated, information contained in this prospectus concerning our industry and the market in which we operate, including our market position, market opportunity and market size, is based on information from various sources such as industry publications, on assumptions that we have made based on such data and other similar sources and on our knowledge of the markets for our products. These data involve a number of assumptions and limitations. We have not independently verified any third-party information.

In addition, projections, assumptions and estimates of our future performance and the future performance of the industry in which we operate is necessarily subject to a high degree of uncertainty and risk due to a variety of factors, including those described in the section entitled “Risk Factors” and elsewhere in this prospectus. These and other factors could cause results to differ materially from those expressed in the estimates made by the independent parties and by us.

USE OF PROCEEDS

We estimate that the net proceeds to us from the sale of the common shares in this offering will be approximately $ million, or approximately $ million if the underwriters exercise in full their option to purchase additional common shares, at an assumed initial public offering price of $ per common share (the midpoint of the price range set forth on the cover page of this prospectus) and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. Each $1.00 increase (decrease) in the assumed initial public offering price of $ per common share would increase (decrease) the net proceeds to us from this offering by approximately $ million, assuming the number of common shares offered by us, as set forth on the cover page of this prospectus, remains the same. We may also increase or decrease the number of common shares we are offering. Each increase (decrease) of one million common shares in the number of common shares offered by us would increase (decrease) the net proceeds to us from this offering by approximately $ million, assuming that the assumed initial public offering price remains the same, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. We do not expect that a change in the initial public offering price or the number of common shares by these amounts would have a material effect on our use of the proceeds from this offering, although it may accelerate the time at which we will need to seek additional capital.

We currently expect to use the net proceeds from this offering as follows:

- approximately $ million for preclinical and early clinical development of our Dravet Syndrome and XEN801 programs;
- approximately $ million to fund genetic research and drug discovery activities using our Extreme Genetics discovery platform; and
- the remainder for working capital and general corporate purposes.

We may also use a portion of the net proceeds in connection with any exercise of co-development or co-promotion rights under our collaborations; however, no such rights are currently exercisable. In addition, we may also use a portion of the net proceeds to acquire, license and invest in complementary products, technologies or businesses; however, we currently have no agreements or commitments to complete any such transaction.

This expected use of the net proceeds of this offering represents our intentions based on our current plans and business conditions, which could change in the future as our plans and business conditions evolve. As of the date of this prospectus, we cannot predict with certainty all of the particular uses for the net proceeds to be received upon the closing of this offering or the amounts that we will actually spend on the uses set forth above. The amounts, allocation and timing of our actual expenditures will depend upon numerous factors, including:

- the focus and results of our research, drug discovery and preclinical development activities;
- the type, number, costs and results of any clinical trials for our product candidates;
- regulatory actions relating to our product candidates;
- our ability to achieve milestones and obtain royalty payments from our collaborators;
- whether any co-funding or co-promotion rights under our strategic alliances are exercised;
- competitive and technological developments; and
- the rate of growth, if any, of our business.

DIVIDEND POLICY

We have never declared or paid any cash dividends on our common shares or any other securities. We currently anticipate that we will retain all available funds and any future earnings, if any, in the foreseeable future for use in the operation of our business and do not currently anticipate paying cash dividends in the foreseeable future. Payment of future cash dividends, if any, will be at the discretion of the board of directors, subject to applicable law and will depend on various factors, including our financial condition, operating results, current and anticipated cash needs, the requirements of current or then-existing debt instruments and other factors the board of directors deems relevant.

CAPITALIZATION

The following table summarizes our capitalization as of June 30, 2014:

- on an actual basis;
- on a pro forma basis to reflect (1) the conversion of all outstanding preferred shares into an aggregate of 37,549,041 common shares upon the closing of this offering including the conversion of all of our outstanding Series A preferred shares and Series B preferred shares into 10,431,507 common shares and the conversion of all of our outstanding Series E preferred shares into 27,117,534 common shares, based on an assumed initial public offering price of $ per share (the midpoint of the price range set forth on the cover page of this prospectus) and the adjustment provisions relating to our Series E preferred shares described in the section titled "Description of Share Capital"; (2) the automatic conversion of all subscription rights outstanding upon the closing of this offering into an aggregate of 51,810 common shares; and (3) a for reverse share split of our common and preferred shares to be effected prior to the closing of this offering; and
- on a pro forma as adjusted basis, to further reflect the sale and issuance by us of common shares in this offering at an assumed initial price to public of $ per common share, the midpoint of the price range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

Investors should read the information in this table together with the financial statements and related notes to those statements, as well as the sections of this prospectus captioned "Selected Financial Data" and "Management's Discussion and Analysis of Financial Condition and Results of Operations."

	AS OF JUNE 30, 2014		
	ACTUAL	PRO FORMA	PRO FORMA AS ADJUSTED (1)
	(unaudited) (in thousands, except per share amounts)		
Redeemable convertible preferred shares, without par value; issuable in series, 32,116,669 authorized, 31,437,274 preferred shares issued and outstanding, actual; no preferred shares authorized, issued or outstanding, pro forma; no preferred shares authorized, issued or outstanding, pro forma as adjusted	$ 102,488	$ —	$ —
Shareholders' deficit:			
Preferred shares, without par value, no shares authorized, issued or outstanding, actual; unlimited shares authorized, no shares issued or outstanding, pro forma; unlimited shares authorized, no shares issued or outstanding, pro forma as adjusted	—	—	—
Common shares, without par value, unlimited common shares authorized, 6,552,128 common shares issued and outstanding, actual; unlimited common shares authorized, common shares issued and outstanding, pro forma; unlimited common shares authorized, common shares issued and outstanding, pro forma as adjusted	6,182	108,782	
Additional paid-in capital	30,064	29,952	
Accumulated deficit	(114,149)	(114,149)	
Accumulated comprehensive income	2,521	2,521	
Total shareholders' (deficit) equity	(75,382)	27,106	
Total capitalization	$ 27,106	$ 27,106	$

(1) Each $1.00 increase (decrease) in the assumed initial public offering price of $ per common share, the midpoint of the price range set forth on the cover page of this prospectus, would increase (decrease) each of additional paid-in capital, total shareholders' deficit and total capitalization by approximately $ million, assuming that the number of common shares offered by us, as set forth on the cover page of this prospectus, remains the same, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. We may also increase or decrease the number of common shares we are offering. Each increase (decrease) of one million common shares in the number of common shares offered by us would increase (decrease) each of additional paid-in capital, total shareholders' deficit and total capitalization by approximately $ million, assuming that the assumed initial public offering price remains the same, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. The pro forma as adjusted information discussed above is illustrative only and will adjust based on the actual initial public offering price and other terms of this offering determined at pricing.

The outstanding share information in the table above excludes, as of June 30, 2014:

- 7,013,578 common shares issuable upon exercise of options outstanding as of June 30, 2014, with a weighted-average exercise price of CAD$0.96 per common share, or $0.90 per common share, as converted; and
- 2,000,000 common shares reserved for future issuance under our 2014 Equity Incentive Plan, as amended, which will become effective on the business day immediately prior to the date of effectiveness of the registration statement of which this prospectus forms a part, and any future automatic increase in common shares reserved for issuance under such plan.

DILUTION

Investors purchasing our common shares in this offering will experience immediate and substantial dilution in the pro forma net tangible book value of their common shares. Dilution in pro forma net tangible book value represents the difference between the price to public per common share and the pro forma net tangible book value per share immediately after the offering.

The historical net tangible book value of our common shares as of June 30, 2014 was $27.1 million, or $4.14 per common share. Historical net tangible book value (deficit) per common share represents our total tangible assets (total assets less intangible assets) less total liabilities divided by the number of outstanding common shares.

After giving effect to (1) the automatic conversion of the outstanding preferred shares into an aggregate of 37,549,041 common shares upon the closing of this offering; (2) the automatic conversion into an aggregate of 51,810 common shares of all subscription rights outstanding upon the closing of this offering; (3) the issuance of common shares in this offering; and (4) receipt of the net proceeds from the sale of common shares in this offering at an assumed initial public offering price of $ per common share (the midpoint of the price range set forth on the cover page of this prospectus), after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us, the pro forma as adjusted net tangible book value as of June 30, 2014 would have been approximately $ million, or $ per common share. This represents an immediate increase in pro forma as adjusted net tangible book value of $ per common share to existing shareholders and an immediate dilution of $ per common share to new investors purchasing common shares in this offering.

The following table illustrates this dilution on a per common share basis to new investors:

Assumed initial price to public per common share		$
Historical net tangible book value per common share as of June 30, 2014	$4.14	
Decrease per common share attributable to conversion of redeemable convertible preferred shares		
Decrease per common share attributable to the conversion of subscription rights		
Pro forma net tangible book deficit per common share before this offering		
Increase in net tangible book value per common share attributable to investors participating in this offering		
Pro forma as adjusted net tangible book value per common share, as adjusted to give effect to this offering		
Pro forma dilution per common share to investors participating in this offering		$

Each $1.00 increase (decrease) in the assumed initial public offering price of $ per common share (the midpoint of the price range set forth on the cover page of this prospectus) would increase (decrease) the pro forma as adjusted net tangible book value by approximately $ million, or approximately $ per common share, and increase (decrease) the pro forma dilution per share to investors in this offering by approximately $ per common share, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. We may also increase or decrease the number of common shares we are offering. An increase of one million common shares in the number of shares offered by us would increase the pro forma as adjusted net tangible book value by approximately $, or $ per common share, and the pro forma dilution per common share to investors in this offering would be $ per common share, assuming that the assumed initial public offering price remains the same, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. Similarly, a decrease of one million common shares in the number of common shares offered by us would decrease the pro forma as adjusted net tangible book value by approximately $ million, or $ per common share, and the pro forma dilution per common share to investors in this offering would be $

per common share, assuming that the assumed initial public offering price remains the same, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. The pro forma as adjusted information discussed above is illustrative only and will adjust based on the actual initial public offering price and other terms of this offering determined at pricing.

If the underwriters exercise their option in full to purchase additional common shares in this offering, the pro forma as adjusted net tangible book value per common share after the offering would be $ per common share, the increase in the pro forma net tangible book value per common share to existing shareholders would be $ per common share and the pro forma dilution to new investors purchasing common shares in this offering would be $ per common share.

The following table summarizes, on a pro forma basis as of June 30, 2014, the differences between the number of common shares purchased from us, the total consideration and the weighted-average price per share paid by existing shareholders and by investors participating in this offering at an assumed initial public offering price of $ per share, before deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

	COMMON SHARES PURCHASED		TOTAL CONSIDERATION		WEIGHTED-AVERAGE PRICE PER COMMON SHARE
	NUMBER	PERCENT	AMOUNT	PERCENT	
Existing shareholders before this offering		%	$	%	$
Investors participating in this offering					
Total		%	$	%	

Each $1.00 increase (decrease) in the assumed initial public offering price of $ per common share (the midpoint of the price range set forth on the cover page of this prospectus) would increase (decrease) total consideration paid by new investors by approximately $ million, assuming that the number of common shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. We may also increase or decrease the number of shares we are offering. An increase (decrease) of one million common shares in the number of common shares offered by us would increase (decrease) total consideration paid by new investors by $ million, assuming that the assumed initial public offering price remains the same, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

The number of common shares to be outstanding following this offering is based on 44,152,979 common shares outstanding as of June 30, 2014, after giving effect to (i) the conversion of all outstanding convertible preferred shares into an aggregate of 37,549,041 common shares upon the closing of this offering, (ii) the conversion of all outstanding subscription rights into an aggregate of 51,810 common shares upon the closing of this offering, and (iii) a for reverse share split. The outstanding share information in the table above excludes, as of June 30, 2014:

- 7,013,578 common shares issuable upon exercise of options outstanding as of June 30, 2014, with a weighted-average exercise price of CAD$0.96 per common share, or $0.90 per common share, as converted; and
- 2,000,000 common shares reserved for future issuance under our 2014 Equity Incentive Plan, as amended, which will become effective on the business day immediately prior to the effective date of the registration statement of which this prospectus forms a part, and any future automatic increase in common shares reserved for issuance under such plan.

Share reserves for our share-based compensation plans will also be subject to automatic annual increase in accordance with the terms of the plans. To the extent that new options are issued under our share-based compensation plans or we issue additional common shares in the future, there will be further dilution to investors participating in this offering.

SELECTED FINANCIAL DATA

We derived the selected statement of operations data for the fiscal years ended December 31, 2011, 2012 and 2013 and the balance sheet data as of December 31, 2012 and 2013 from our audited financial statements included elsewhere in this prospectus. The selected statement of operations data for the six months ended June 30, 2013 and 2014 and the balance sheet data as of June 30, 2014 have been derived from unaudited interim financial statements included elsewhere in this prospectus and have been prepared on the same basis as the audited financial statements. In the opinion of management, the unaudited data reflects all adjustments, which include only normal and recurring adjustments, necessary for a fair presentation of the results as of and for the periods. The balance sheet data as of December 31, 2011 have been derived from audited financial statements which are not included in this prospectus. Our historical results are not necessarily indicative of results to be expected in any future period and results for the six months ended June 30, 2014 are not necessarily indicative of results to be expected for the full year ending December 31, 2014. You should read the following selected financial data below in conjunction with our financial statements and related notes included elsewhere in this prospectus and the "Management's Discussion and Analysis of Financial Condition and Results of Operations" section of this prospectus. Our audited annual financial statements have been prepared in U.S. dollars and in accordance with U.S. Generally Accepted Accounting Principles.

	YEAR ENDED DECEMBER 31,			SIX MONTHS ENDED JUNE 30,	
	2011	2012	2013	2013	2014
				(unaudited)	
	(in thousands, except per share data)				
Statement of Operations Data:					
Revenue:					
Collaboration revenue	$ 6,915	$ 14,300	$ 27,352	$ 10,985	$ 10,297
Royalties	3	8	4	—	2
	6,918	14,308	27,356	10,985	10,299
Operating expenses:					
Research and development	12,302	10,455	12,303	6,983	5,099
General and administrative	6,730	7,006	5,341	2,828	2,790
Total operating expenses	19,032	17,461	17,644	9,811	7,889
Income (loss) from operations	(12,114)	(3,153)	9,712	1,174	2,410
Other income (expense):					
Interest income	153	144	338	76	278
Interest expense	(91)	(93)	(64)	(41)	—
Foreign exchange gain (loss)	60	(169)	2,035	1,920	(85)
Gain (loss) on write-off and disposal of assets	—	(1,030)	11	11	—
Net income (loss)	(11,992)	(4,301)	12,032	3,140	2,603
Net income (loss) attributable to participating securities	—	—	8,199	3,140	2,603
Net income (loss) attributable to common shareholders	$ (11,992)	$ (4,301)	$ 3,833	$ —	$ —
Net income (loss) per share—basic (1)	$ (1.86)	$ (0.67)	$ 0.59	$ 0.00	$ 0.00
Net income (loss) per share—diluted (1)	$ (1.86)	$ (0.67)	$ 0.39	$ 0.00	$ 0.00
Weighted-average common shares outstanding used in computing basic net income (loss) per share (1)	6,433	6,452	6,501	6,478	6,548
Weighted-average common shares outstanding used in computing diluted net income (loss) per share (1)	6,433	6,452	9,765	6,478	6,548
Pro forma net income (loss) per share—basic (unaudited) (2)			$ 0.27		$ 0.06
Pro forma net income (loss) per share—diluted (unaudited) (2)			$ 0.25		$ 0.05
Weighted-average common shares outstanding used in computing the proforma net income (loss) per share—basic (unaudited) (2)			44,110		44,155
Weighted-average common shares outstanding used in computing the proforma net income (loss) per share—diluted (unaudited) (2)			47,314		47,765

	AS OF DECEMBER 31, 2011	2012	2013	AS OF JUNE 30 2014 (unaudited)
	(in thousands)			
Balance Sheet Data:				
Cash, cash equivalents and marketable securities	$ 14,924	$ 60,162	$ 49,276	$ 44,710
Working capital	20,536	41,507	31,666	27,977
Total assets	30,465	63,305	54,487	50,712
Note payable	1,586	1,665	—	—
Redeemable convertible preferred shares	102,488	102,488	102,488	102,488
Total shareholders' deficit	(86,316)	(89,865)	(78,372)	(75,382)

(1) See Note 2 to our financial statements appearing elsewhere in this prospectus for an explanation of the method used to calculate basic and diluted net income (loss) per common share and the weighted-average number of common shares used in computation of the per common share amounts.

(2) Pro forma net income (loss) per share represents net income (loss) divided by the pro forma weighted-average shares outstanding, and reflects (i) the conversion of all outstanding preferred shares into an aggregate of 37,549,041 common shares, including the conversion of all of our outstanding Series A preferred shares and Series B preferred shares into 10,431,507 common shares and the conversion of all of our Series E preferred shares into 27,117,534 common shares, based upon an assumed initial public offering price of $ per share (the midpoint of the price range set forth on the cover page of this prospectus) and the adjustment provisions relating to our outstanding Series E preferred shares described in "Description of Share Capital," upon the closing of this offering, and (ii) the conversion of the weighted-average number of outstanding subscription rights for the period into an aggregate of 58,103 common shares.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following discussion and analysis of our financial condition and results of operations together with our financial statements and related notes appearing in this prospectus. Some of the information contained in this discussion and analysis or set forth in other parts of this prospectus, including information with respect to our plans and strategy for our business, includes forward-looking statements that involve risks and uncertainties. You should read the "Risk Factors" section of this prospectus for a discussion of important factors that could cause actual results to differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis.

Overview

We are a clinical-stage biopharmaceutical company discovering and developing a pipeline of differentiated therapeutics for orphan indications that we intend to commercialize on our own, and for larger market indications that we intend to partner with global pharmaceutical companies. We have built a core enabling discovery platform for the discovery of validated drug targets by studying rare human diseases with extreme traits, including diseases caused by mutations in ion channels, known as channelopathies. We have an integrated platform that includes in-house capabilities for human genetics, small molecule drug discovery, and pre-clinical and clinical development.

Our business was founded on our proprietary discovery platform, which we refer to as Extreme Genetics. Extreme Genetics involves the study of families where individuals exhibit inherited severe traits, or phenotypes. By identifying and characterizing single-gene defects responsible for these phenotypes, we gain insights into human disease biology to better select targets for therapeutic intervention. Our Extreme Genetics discovery platform has yielded the first approved gene therapy product in the European Union, or the EU, a broad development pipeline and multiple pharmaceutical partnerships.

Our pharmaceutical partners include Teva Pharmaceutical Industries, Ltd., or Teva (through its subsidiary, Ivax International GmbH), Genentech, Inc., or Genentech, and Merck & Co., Inc., or Merck (through its affiliate, Essex Chemie AG). Our pharmaceutical collaborations have generated in aggregate over $140.0 million in non-equity funding to date with the potential to provide us with over $1.0 billion in future milestone payments, as well as royalties and co-promotion income on product sales.

To date, our Extreme Genetics discovery platform has yielded:

- Glybera, developed by our licensee uniQure Biopharma B.V., or uniQure, the first, and currently the only, gene therapy approved in the EU for the treatment of the orphan disorder lipoprotein lipase deficiency, or LPLD;
- TV-45070 (formerly XEN402), a product candidate with four Phase 2 proof-of-concept clinical trials completed. Our partner Teva is conducting a 300-patient, randomized Phase 2b clinical trial in osteoarthritis, or OA, of the knee and is planning clinical development in neuropathic pain indications, including postherpetic neuralgia, or PHN;
- GDC-0276, a product candidate being developed in collaboration with Genentech for the treatment of pain. In August 2014, Genentech received approval from Health Canada to initiate a Phase 1 clinical trial for GDC-0276; and
- pre-clinical programs, including a sodium channel inhibitor for the orphan disorder Dravet Syndrome, or DS, and XEN801, a stearoyl Co-A desaturase, or SCD1, inhibitor for the treatment of acne. We anticipate filing an investigational new drug application, or IND, for XEN801 in the first half of 2015 and an IND for our DS program in 2016.

We believe that our Extreme Genetics discovery platform enhances the likelihood of discovering a drug target that has a major effect in humans. From these discoveries, we can gain an improved understanding of how a drug that modulates the target might act when given to a human.

We have funded our operations primarily through payments received from our pharmaceutical collaborators and government funding as well as through the sale of convertible preferred shares in various financing transactions. Through June 30, 2014, we have received an aggregate of approximately $265.2 million to fund our operations, of which approximately $145.7 million was non-equity funding pursuant to collaboration and license agreements, approximately $17.0 million was pursuant to government funding, and approximately $102.5 million was pursuant to the sale of our preferred shares. For 2011, 2012, 2013 and the six months ended June 30, 2014, we recognized revenue for an aggregate of approximately $6.9 million, $14.3 million, $27.4 million and $10.3 million, respectively, consisting primarily of funding from our collaborators.

Though our revenue from our collaboration and license agreements has resulted in net income of $2.6 million for the six months ended June 30, 2014 and net income of $12.0 million for the year ended December 31, 2013, we have incurred net losses on an annual basis since inception and do not expect to have sustained profitability for the foreseeable future. We had net losses of $12.0 million and $4.3 million for the years ended December 31, 2011 and 2012, respectively, and had an accumulated deficit of $114.1 million as of June 30, 2014, from expenses incurred in connection with our research programs and from general and administrative costs associated with our operations.

We have not generated any royalty revenue or other revenue from product sales, and we expect that our revenue in the near term will be substantially dependent on our collaboration agreements. Given the uncertain nature of clinical development of our current and future product candidates and the commercialization of current and future products, we cannot predict when or whether we will receive further milestone payments under our current or future collaboration agreements or whether we will be able to report either revenue or net income in future years.

We expect to continue to incur significant expenses and operating losses for at least the next 12 to 24 months. We anticipate that our expenses will increase substantially as we:

- continue our research and preclinical and clinical development of our product candidates;
- seek regulatory and marketing approvals for any of our product candidates that successfully complete clinical trials;
- make milestone and other payments under our in-license agreements;
- maintain, protect and expand our intellectual property portfolio;
- attract, hire and retain skilled personnel; and
- create additional infrastructure to support our operations as a public company and otherwise.

Financial Operations Overview

Revenue

To date, our revenue has been primarily derived from collaboration and licensing agreements as well as, to a lesser extent, government funding. In addition, we have received nominal royalties from a diagnostic license. To date, we have not generated any royalty revenue from product sales, and do not otherwise anticipate generating revenue from product sales other than from sales of Glybera under our license to uniQure for the foreseeable future, if ever. We have entered into several collaboration agreements, the most significant of which, with respect to revenue, are described below.

uniQure. Effective August 2000, we entered into a sublicense and research agreement with uniQure (formerly Amsterdam Molecular Therapeutics), pursuant to which we granted to uniQure an exclusive, worldwide sublicense under certain intellectual property controlled by us to develop and commercialize technology and compounds related to the variant of lipoprotein lipase, or LPL, called LPL^{S447X}. Together with collaborators from the University of British Columbia, or UBC, we demonstrated that the LPL^{S447X} variant resulted in increased LPL enzyme activity leading to reduced triglyceride levels in humans. Under our sublicense and research agreement with uniQure, we collaborated with uniQure and UBC on preclinical activities, and thereafter uniQure developed an LPL gene therapy product, Glybera, which contains the LPL^{S447X} variant. Glybera was approved in the EU in October 2012 to treat LPLD in patients with severe or multiple pancreatitis attacks, despite dietary fat restrictions. uniQure conducted the clinical trials and is responsible for the commercialization of Glybera.

Under the terms of the agreement, we are eligible to receive mid single-digit royalties on net sales of the licensed products, for sales made by uniQure and its affiliates. The royalty rates for sales made by uniQure and its affiliates are reduced to a low single-digit when the licensed patents expire. In July 2013, uniQure announced that it had entered into a partnership with Chiesi Farmaceutici, S.p.A., or Chiesi, for the commercialization of Glybera in the EU and more than a dozen other countries, including Brazil, China, Mexico and Russia. We believe that Chiesi plans to launch Glybera in the fourth quarter of 2014 or the first quarter of 2015 in Europe, and that uniQure is pursuing a U.S. product approval strategy with plans to file a Biologics License Application, or BLA, with the U.S. Food and Drug Administration, or the FDA, in 2017. With respect to uniQure's sublicense to Chiesi, we are eligible to receive a percentage in the low twenties of all non-royalty compensation relating to the licensed technology or products that uniQure receives from Chiesi (including, for example, upfront payments and milestone payments), a percentage in the low twenties of any royalties that uniQure receives from Chiesi based on sales of technology or products covered by the licensed patents, plus a mid single-digit percentage of certain further royalties that uniQure receives from Chiesi based on sales of our licensed technology or products after the expiration of all licensed patents covering the product. If uniQure grants a sublicense to a third party other than to Chiesi, then we are eligible to receive a percentage in the low twenties of all non-royalty compensation relating to the licensed technology or products that uniQure receives from such sublicensee (for example, upfront payments and milestone payments), plus a percentage in the low twenties of any royalties that uniQure receives from such sublicensee based on sales of technology or products covered by the licensed patents.

Teva. In December 2012, we entered into a collaborative development and license agreement with Teva, through its subsidiary, Ivax International GmbH, pursuant to which we granted Teva an exclusive worldwide license to develop and commercialize certain products, including TV-45070. Under the terms of the agreement, Teva paid us an upfront fee of $41.0 million. We are collaborating with Teva to further develop TV-45070, and Teva is funding all development costs with respect to the licensed products. Teva is providing funding to us for certain of our full-time equivalents, or FTEs, performing the research collaboration plan. In addition, we are eligible to receive potential milestone payments totaling up to $335.0 million, comprised of a $20.0 million clinical milestone payment, up to $285.0 million in regulatory milestone payments, and a $30.0 million sales-based milestone payment. If TV-45070 is approved, we are also eligible to receive royalties in the low teens to low twenties on net sales of the licensed products for the timeframe that such products are covered by the licensed patents and in certain other instances.

We have an option to a 20% to 30% co-promotion interest for products incorporating TV-45070 in the U.S. Our exercise of this option is subject to meeting objective financial conditions, staffing requirements and compliance standards to be determined in Teva's reasonable discretion in accordance with standard industry practice. Our co-promotion option is exercisable upon the filing of the first new drug application, or NDA, for a TV-45070 product with the FDA and we will be obligated to pay an opt-in fee to Teva, which is calculated by multiplying our co-promotion interest (as a percentage) by the amount of certain milestones paid or payable by Teva, to which is added certain past and future development costs incurred by Teva with respect to the product for the U.S. Our co-promotion interest is in the 20% to 30% range, and equals our percentage share of detailing activities and co-promotion expenses. Such opt-in fee is payable as a reduction to the milestone payments, our share of operating profits, or a combination of the two that Teva would otherwise owe to us. If we exercise this option, upon paying an opt-in fee to Teva we will be eligible to receive, in lieu of royalties with respect to such product sales in the U.S., a percentage share (equal to our co-promotion interest) of operating profits from such product sales in the U.S.

Genentech. In December 2011, we entered into a collaborative research and license agreement with Genentech and its affiliate, F. Hoffman-La Roche Ltd, or Roche, to discover and develop small and large molecules that selectively inhibit the Nav1.7 sodium channel as well as companion diagnostics for the potential treatment of pain. Pursuant to this agreement, we granted Genentech a worldwide exclusive license to develop and commercialize compounds directed to Nav1.7 and products incorporating such compounds for all uses. We also granted Genentech a worldwide non-exclusive license to diagnostic products for the purpose of developing or commercializing such compounds.

Under the terms of the agreement, Genentech paid us an upfront fee of $10.0 million, a $5.0 million milestone payment for the selection of GDC-0276 for development and an $8.0 million milestone payment was earned upon the approval by Health Canada of the Clinical Trial Application for GDC-0276. Genentech is providing funding to us for certain of our FTEs performing the research collaboration plan. In addition, we are eligible to receive pre-commercial and commercial milestone payments with respect to the licensed products totaling up to an additional

$613.0 million, comprised of up to $45.5 million in preclinical and clinical milestone payments, up to $387.5 million in regulatory milestone payments, and up to $180.0 million in sales-based milestone payments for multiple products and indications. In addition, we are eligible to receive royalties based on net sales of the licensed products, which range from a mid single-digit percentage to ten percent for small-molecule inhibitors for the timeframe that such products are covered by the licensed patents and a low single-digit percentage thereafter, plus a single-digit percentage for large-molecule inhibitors of Nav1.7.

In March 2014, we entered into a new agreement with Genentech for pain genetics, where we intend to use our Extreme Genetics discovery platform to focus on identifying genetic targets associated with rare phenotypes where individuals have an inability to perceive pain or where individuals have non-precipitated spontaneous severe pain. Pursuant to the terms of this agreement, any intellectual property arising out of the collaboration will be jointly owned by us and Genentech. We have also granted Genentech a time-limited, exclusive right of first negotiation on a target-by-target basis to form joint drug discovery collaborations. Under the terms of this agreement, Genentech paid us an upfront payment of $1.5 million. In addition, we are eligible for an additional $2.0 million in milestone payments, and, at our option, a Genentech affiliate will invest up to $5.0 million in a private placement concurrent with this public offering.

Merck. In June 2009, we entered into an exclusive collaborative research and option agreement with Merck, pursuant to which we conducted a research program to discover and develop novel small-molecule candidates for the potential treatment of cardiovascular disease. Merck provided payments to us for our FTEs who performed our activities pursuant to the research program conducted under the Merck agreement. The Merck collaborative research program ended in December 2012.

Under the terms of the agreement, Merck had the option to obtain an exclusive license under certain intellectual property controlled by us to develop and commercialize compounds and products directed to targets in the research program, which has now expired. In June 2012, Merck exercised its option and paid us $2.0 million to obtain such a worldwide exclusive license to develop and commercialize compound inhibitors of a target that was identified using our Extreme Genetics discovery platform.

Through June 30, 2014, we have received milestone payments and an option fee totaling $9.0 million, and we are eligible for further research, development and regulatory milestone payments of up to $64.0 million, comprised of $21.0 million in preclinical and clinical milestone payments and up to $43.0 million in regulatory milestone payments for products directed to the licensed target as well as royalties from the mid to high single-digit range.

We have an option to co-fund the Phase 1 and first Phase 2 clinical trials of product candidates licensed by Merck by paying Merck 50% of such development costs. Such co-funding option is available at the IND-filing stage for the applicable product candidate. If we exercise our co-funding option then the maximum eligible milestone amounts due to us increase to $86.5 million and the royalties increase to the high single-digit to the sub-teen double-digit range.

Genome BC. We entered into a research funding agreement with Genome BC in January 2009. Under the agreement with Genome BC, we carried out certain research activities with partial funding from Genome BC provided on a quarterly basis in arrears over the term of the research program. This agreement expired at the end of its term on September 2013.

The following table is a summary of revenue recognized from our current collaboration and licensing agreements for each of the years ended December 31, 2011, 2012 and 2013 and the six months ended June 30, 2013 and 2014 (in thousands):

	YEAR ENDED DECEMBER 31,			SIX MONTHS ENDED JUNE 30,	
	2011	2012	2013	2013	2014
				(unaudited)	
uniQure:					
Milestone payment	$ —	$ 198	$ 531	$ —	$ —
Teva:					
Recognition of upfront payment	—	927	13,143	6,607	6,120
Research funding	—	—	630	294	167
Genentech:					
Recognition of upfront payment	94	3,431	3,300	1,659	1,755
Research funding	93	3,517	4,514	2,257	2,255
Milestone payment	—	—	5,062	—	—
Merck:					
Recognition of initial milestone payment	2,145	1,060	—	—	—
Option fee	—	2,060	—	—	—
Research funding	3,206	2,442	—	—	—
Milestone payment	1,038	—	—	—	—
Genome BC:					
Research funding	339	665	172	168	—
Total collaboration revenue	$ 6,915	$ 14,300	$27,352	$ 10,985	$ 10,297

Through June 30, 2014, we had recognized upfront fees and milestone payments totaling CAD$1.1 million, pursuant to our agreement with uniQure. We are eligible to receive certain additional milestone payments of less than CAD$1.0 million for Glybera and for each subsequent product, if any, developed pursuant to the agreement.

Pursuant to the terms of our agreement with Teva, we received an upfront payment of $41.0 million. We determined that the various deliverables under this agreement should be considered as a single unit of accounting. As such, the $41.0 million upfront payment is being recognized as revenue ratably over the expected period of research performance of pre-commercial activities, which is the three-year period from December 2012 through December 2015.

Pursuant to the terms of our December 2011 agreement with Genentech, we received an upfront payment of $10.0 million. We determined that the various deliverables under this agreement should be considered as a single unit of accounting. As such, the $10.0 million upfront payment is being recognized as revenue ratably over the expected period of research performance, which is the three-year period from December 2011 through December 2014. In September 2013, we received a $5.0 million milestone payment for the selection of a compound for good laboratory practices, or GLP, toxicology studies. We recognized the milestone payment upon achievement in August 2013.

Pursuant to the terms of our March 2014 agreement with Genentech, we received an upfront payment of $1.5 million. We determined that the various deliverables under this agreement should be considered as a single unit of accounting. As such, the $1.5 million upfront payment is being recognized as revenue ratably over the expected period of research performance, which is the two-year period from March 2014 to March 2016.

Pursuant to the terms of our agreement with Merck, we received an initial milestone payment of $5.0 million in February 2010. We determined that this initial milestone payment was not substantive and should not be considered a separate element. As such, we recognized the initial milestone payment of $5.0 million as revenue ratably over the expected period of research performance of pre-commercial activities, which was the period from February 2010 through June 2012. Since the beginning of 2011, we have received both an option fee and two milestone payments from Merck. Each of these payments was determined to be substantive and at risk at the inception of the agreement and as such have been recognized as revenue in the period received.

As our other internal and partnered products are in various stages of clinical and preclinical development, we do not expect to generate any revenue from product sales other than from our share of revenue related to our agreement with uniQure for at least the next several years. We expect that revenue for the next several years will be derived from our agreement with uniQure and our eligibility to receive a share of the compensation received by uniQure relating to the technology or products licensed by us, and FTEs and milestone payments under our current collaboration agreements and any additional collaboration agreements that we may enter into in the future. We cannot provide any assurance as to the extent or timing of future milestone payments or royalty payments or that we will receive any future payments at all.

We expect that any revenue we generate will fluctuate quarter to quarter as a function of the timing and amount of milestones and other payments from our existing collaborations and any future collaborations.

The following table is a summary of our deferred revenue for our collaboration and licensing agreements as of December 31, 2011, 2012 and 2013 and June 30, 2014 (in thousands):

	DECEMBER 31,			JUNE 30,
	2011	2012	2013	2014 (unaudited)
Teva	$ —	$ 39,907	$ 24,691	$ 18,326
Genentech	9,949	6,745	3,115	2,883
Merck	1,155	—	—	—
Total deferred revenue	$ 11,104	$ 46,652	$ 27,806	$ 21,209

We expect such deferred revenue remaining as of June 30, 2014 to be recognized as revenue in the applicable fiscal years ending December 31, 2014, 2015 and 2016 based on our accounting policy for revenue recognition indicated for each collaboration agreement.

Operating Expenses

The following table summarizes our operating expenses for the years ended December 31, 2011, 2012 and 2013 and for the six months ended June 30, 2013 and 2014 (in thousands):

	YEAR ENDED DECEMBER 31,			SIX MONTHS ENDED JUNE 30 (unaudited)	
	2011	2012	2013	2013	2014
Research and development	$ 12,302	$ 10,455	$ 12,303	$ 6,983	$ 5,099
General and administrative	6,730	7,006	5,341	2,828	2,790
Total operating expenses	$ 19,032	$ 17,461	$ 17,644	$ 9,811	$ 7,889

Research and Development Expenses

Research and development expenses represent costs incurred to conduct research on our product candidates in collaboration with Teva, Genentech and Merck, as well as further research and development of our other proprietary product candidates.

Research and development expenses consist of costs incurred in performing research and development activities, including salary, related benefits and share-based compensation for employees engaged in scientific research and development, third-party contract costs relating to research, formulation, manufacturing, preclinical studies and clinical trial activities, third-party license and collaboration fees, laboratory consumables and allocated facility-related costs.

Project-specific expenses reflect costs directly attributable to our clinical development candidates and our preclinical candidates once nominated and selected for further development. All remaining research and development expenses are reflected in early-stage discovery programs. At any given time, we have several active early-stage research and drug discovery programs. Our personnel and infrastructure are typically deployed over multiple projects and are not directly linked to any individual internal early-stage research or drug discovery program. Therefore, we do not maintain financial information for our internal early-stage research and internal drug discovery programs on a project-specific basis.

We expense all research and development costs as incurred. We expect that our research and development expenses will increase in the future as we advance our proprietary product candidates into clinical development, conduct our development activities under our agreements with Teva and Genentech, advance our internal drug discovery programs into preclinical development and continue our early-stage research. The increase in expense will likely include added personnel and third-party contracts related to research, formulation, manufacturing, preclinical studies and clinical trial activities as well as third-party license and collaboration fees and laboratory consumables.

Clinical development timelines, likelihood of regulatory approval and commercialization and associated costs are uncertain and difficult to estimate and can vary significantly. We anticipate determining which research and development projects to pursue as well as the level of funding available for each project based on the scientific research and preclinical and clinical results of each product candidate and related regulatory action. We expect our research and development expenses to continue to represent our largest category of operating expense for at least the next 12 to 24 months.

General and Administrative Expenses

General and administrative expenses consist primarily of salary, related benefits and share-based compensation of our executive, finance, business development and administrative functions, travel expenses, allocated facility-related costs not otherwise included in research and development expenses, and professional fees for auditing, tax and legal services, including legal expenses for intellectual property protection.

We expect that general and administrative expenses will increase in the future as we expand our operating activities to support increased research and development activities, and build our commercial infrastructure for the potential option for co-promotion of TV-45070 in the U.S., if and when regulatory approval is received.

We also anticipate incurring additional general and administrative expenses as a public company, including costs of additional personnel, additional professional fees for audit, accounting and legal services, director fees, enhanced business and accounting systems, costs related to investor relations and increased premiums for directors' and officers' liability insurance.

Other Income (Expense)

Interest Income. Interest income consists of income earned on our cash and investment balances. Our interest income has not been significant due to the levels of cash and investment balances and low interest earned on such balances. We anticipate that our interest income will continue to fluctuate depending on timing of payments from collaborative partners, our cash and investment balances, and interest rates.

Interest Expense. Interest expense consists of interest incurred on the note payable held by Isis Pharmaceuticals, Inc., or Isis, related to our collaboration agreement for XEN701. As we fully repaid the note payable to Isis in June 2013 and now have no other debts outstanding, we expect to have little or no interest expense in the future. In the fourth quarter of 2013, we discontinued development of XEN701 as the preclinical data did not support its continued advancement. In the first quarter of 2014, we provided formal notice of termination of the agreement to Isis.

Foreign Exchange Gain (Loss). Our functional currency is the Canadian dollar. For presentation purposes, our assets and liabilities are translated to U.S. dollars at exchange rates at the reporting date. Any resulting exchange gains and losses resulting from the translation of U.S. denominated transactions are recorded in current operations.

Gain (Loss) on Write-off and Disposal of Assets. During the year ended December 31, 2012, we wrote-off leasehold improvements at our leased facility which had a net book value of $1.0 million in connection with a lease extension and modification agreement made effective April 1, 2012.

Critical Accounting Policies and Significant Judgments and Estimates

Our management's discussion and analysis of our financial condition and results of operations is based on our financial statements, which have been prepared in conformity with generally accepted accounting principles in the U.S., or U.S. GAAP. The preparation of our financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and the revenue and expenses incurred during the reported periods. We base estimates on our historical experience, known trends and various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

While our significant accounting policies are more fully described in the notes to our financial statements appearing in this prospectus, we believe that the following accounting policies are the most critical to understanding and evaluating our reported financial results.

Revenue Recognition

We have generated revenue primarily through collaboration and license agreements.

Under these collaboration agreements, we may receive non-refundable upfront payments, funding for research and development services, milestone payments, other contingent payments and royalties based on achieving pre-determined milestones. Research funding is recorded as revenue over the period of the research commitment. Milestone and other contingent payments are recorded as revenue when the underlying milestone is achieved if there is substantive uncertainty at the date the collaboration arrangement is entered into that the event will be achieved. In assessing the appropriate revenue recognition related to a collaboration agreement, we first determine whether an arrangement includes multiple elements, such as the delivery of intellectual property rights and research and development services. Upfront payments are recorded as deferred revenue in the balance sheet and are recognized as collaboration revenue over the estimated period of research performance that is consistent with the terms of the research and development obligations contained in the collaboration agreement. We periodically review the estimated period of performance based on the progress made under each arrangement.

In January 2011, the Financial Accounting Standards Board, or FASB, adopted new authoritative guidance on revenue recognition for multiple element arrangements, Accounting Standards Update, or ASU, No. 2009-13, *Multiple-Deliverable Revenue Arrangements*, or ASU 2009-13. This guidance, which applies to multiple element arrangements entered into or materially modified on or after January 1, 2011, amends the criteria for separating and allocating consideration in a multiple element arrangement by modifying the fair value requirements for revenue recognition and eliminating the use of the residual method. The selling prices of deliverables under an arrangement may be derived using third-party evidence, or TPE, or a best estimate of selling price, or BESP, if vendor-specific objective evidence of fair value, or VSOE, is not available.

Deliverables under the arrangement will be separate units of accounting provided that a delivered item has value to the customer on a stand-alone basis and if the arrangement does not include a general right of return relative to the delivered item and delivery or performance of the undelivered items is considered probably and substantially in the control of the vendor. The update also provided new guidance regarding how to apply the standard to arrangements that are materially modified following adoption of the update. The potential future impact of the adoption of this update will depend on the nature of any new agreements entered into or material modifications to existing arrangements.

Under a collaboration agreement, a steering committee is sometimes responsible for overseeing the general working relationships, determining the protocols to be followed in the research and development performed, and evaluating the results from the continued development of the product. We intend to evaluate whether our participation in any joint steering committees is a substantive obligation or whether the services are considered inconsequential or perfunctory.

The factors we would consider in determining if our participation in a joint steering committee is a substantive obligation include: (i) which party negotiated or requested the steering committee, (ii) how frequently the steering committee meets, (iii) whether or not there are any penalties or other recourse if we do not attend the steering committee meetings, (iv) which party has decision making authority on the steering committee and (v) whether or not the collaborator has the requisite experience and expertise associated with the research and development of the licensed intellectual property.

Incentive milestone payments may be triggered either by the results of our research efforts or by events external to us, such as regulatory approval to market a product. We recognize consideration that is contingent upon achievement of a milestone in its entirety as revenue in the period in which the milestone is achieved, but only if the consideration earned from the achievement of a milestone meets all the criteria for the milestone to be considered substantive at the inception of the arrangement. For a milestone to be considered substantive, the consideration earned by achieving the milestone must be commensurate with either our performance to achieve the milestone or the enhancement of the value of the item delivered as a result of a specific outcome resulting from our performance to achieve the milestone, relate solely to our past performance and be reasonable relative to all deliverables and payment terms in the collaboration agreement.

We generally recognize revenue from upfront payments ratably over the term of our estimated period of performance of research under our collaboration agreements in the event that such arrangements represent a single unit of accounting.

In January 2012, we also adopted the guidance (ASU No. 2010-17, *Milestones Method of Revenue Recognition*, or ASU 2010-17) that permits the recognition of revenue contingent upon our achievement of a milestone in its entirety, in the period the milestone is achieved, only if the milestone meets certain criteria and is considered to be substantive.

We made judgments which affect the periods over which we recognized revenue, including modifying such periods based on any amendments to our collaboration agreements.

Accrued Expenses

As part of the process of preparing our financial statements, we are required to estimate accrued expenses. This process involves communicating with our applicable personnel to identify services that have been performed on our behalf and estimating the level of service performed and the associated cost incurred for the service when we have not yet been invoiced or otherwise notified of actual cost. The majority of our service providers invoice us monthly in arrears for services performed. We make estimates of our accrued expenses as of each balance sheet date in our financial statements based on facts and circumstances known to us. Examples of estimated accrued expenses include:

- fees paid to contract research organizations in connection with preclinical and toxicology studies and clinical trials;
- fees paid to investigative sites in connection with clinical trials;
- fees paid to contract manufacturers in connection with the production of clinical trial materials; and
- fees paid for professional services.

There have been no material adjustments to our estimates of accrued expenses for any of the periods presented herein, and we do not anticipate that our payment of actual expenses will differ materially from our estimates at June 30, 2014.

Share-Based Compensation

Compensation expense related to share-based awards to employees, directors and other service providers is measured and recognized in our financial statements based on the fair value method with a corresponding increase in additional paid-in capital. Any consideration we receive from the exercise of stock options is credited to share capital.

We measure the fair value of each option awarded to employees on the grant date using the Black-Scholes option-pricing model and a single option award approach for options issued. The fair value of the award determined at grant is amortized over the vesting period.

We measure the fair value of each option awarded to non-employees on the date of grant and periodically re-measure during the grant period as the options are earned.

We expense the value of the options, net of forfeitures, over the vesting periods of the awards, which is typically three to four years. Prior to the completion of this offering, we used the methodology described below to determine fair value. Following completion of this offering, the fair value of our common shares will be determined based on the quoted market price.

Our use of the Black-Scholes option-pricing model requires the input of highly subjective assumptions, including the fair value of the underlying common shares, risk-free interest rates, the expected term of the option, the expected volatility of the price of our common shares and the expected dividend yield of our common shares. The assumptions used in our option-pricing model represent management's best estimates. These estimates involve inherent uncertainties and the application of management's judgment. If factors change and different assumptions are used, our share-based compensation expense could be materially different in the future.

Our assumptions and estimates are as follows:

- *Fair Value of Common Shares*. Because our common shares are not yet publicly traded, we must estimate their fair value, as discussed in "*Valuation of Common Shares*" below.
- *Risk-Free Interest Rate*. We base the risk-free interest rate used in the Black-Scholes option-pricing model on the implied yield available on the long-term U.S. Treasury note rate.
- *Expected Term.* The expected term is our estimate of when share-based awards are expected to be exercised. We use the simplified method to determine the expected term of options. Under this method the expected term represents the average of the vesting period and the contractual term.
- *Expected Volatility.* We determine the price volatility factor based on the historical volatilities of our publicly-traded peer group as we do not have a trading history for our common shares. Industry peers consist of several public companies in the life sciences industry that are similar to us in size, stage of life cycle, and financial leverage. We did not rely on implied volatilities of traded options in our industry peers' common shares because the volume of activity was relatively low. Following completion of the offering, we intend to continue to consistently apply this process using the same or similar public companies until a sufficient amount of historical information regarding the volatility of our own common shares price becomes available, or unless circumstances change such that the identified companies are no longer similar to us, in which case, more suitable companies whose share prices are publicly available would be utilized in the calculation.
- *Expected Dividend Yield*. We have never declared or paid cash dividends and based on our current expectation we do not expect to pay dividends in the foreseeable future. Consequently, we used an expected dividend yield of zero.

The assumptions we used to determine the fair value of stock options granted during the periods presented are as follows, presented on a weighted-average basis:

	YEAR ENDED DECEMBER 31,			SIX MONTHS ENDED JUNE 30 (unaudited)	
	2011	2012	2013	2013	2014
Risk-free interest rate	2.36%	1.14%	1.03%	1.03%	1.97%
Expected term (in years)	6.2	6.2	6.2	6.2	6.2
Expected volatility	70%	70%	70%	70%	74%
Expected dividend yield	—	—	—	—	—

In addition to the assumptions used in the Black-Scholes option-pricing model, we must also estimate a forfeiture rate to calculate the share-based compensation expense for our awards. Our forfeiture rate is based on an analysis of our actual forfeitures. We will continue to evaluate the appropriateness of the forfeiture rate based on actual forfeiture experience, analysis of employee turnover, and other factors, such as historical experience with option exercises. Quarterly changes in the estimated forfeiture rate can have a significant impact on our share-based compensation expense as the cumulative effect of adjusting the rate is recognized in the period the forfeiture estimate is changed. If a revised forfeiture rate is higher than the previously estimated forfeiture rate, an adjustment is made that will result in a decrease to the share-based compensation expense recognized in the financial statements. If a revised forfeiture rate is lower than the previously estimated forfeiture rate, an adjustment is made that will result in an increase to the share-based compensation expense recognized in the financial statements.

We will continue to use judgment in evaluating the assumptions related to our share-based compensation on a prospective basis. As we continue to accumulate additional data related to our common shares, we may have refinements to our estimates, which could impact our future share-based compensation expense.

Valuation of Common Shares

We are required to estimate the fair value of the common shares underlying our share-based awards when performing the fair value calculations with the Black-Scholes option-pricing model. The fair value of our common shares was determined by our board of directors, with input from management, and takes into account our most recently available valuation of common shares and our assessment of additional objective and subjective factors we believed were relevant and which may have changed between the date of the most recent valuation and the date of the grant. We believe that our audit committee, or the Committee, and our board of directors have the relevant experience and expertise to determine the fair value of our common shares.

Because there has been no public market for our common shares, the Committee and our board of directors considers numerous objective and subjective factors to determine its best estimate of the fair value of our common shares as of each grant date, including, among other thing, the following:

- the lack of marketability of our common shares;
- the rights of the preferred shares and the common shares in a liquidation scenario;
- current market conditions applicable at the time of the assessment;
- our financial condition;
- our business performance;
- the latest sales and issuances of our preferred shares to third parties;
- prevailing industry trends;
- the stage of development of our product candidates; and
- with respect to grants made on or following January 1, 2013, valuation reports prepared by an independent third-party valuation firm.

Option Grants

The following table summarizes by grant date the number of shares subject to options granted between January 1, 2013 and the date of this prospectus, the per share exercise price of the options and the fair value of common shares underlying the options on the date of grant:

GRANT DATE	NUMBER OF COMMON SHARES UNDERLYING OPTIONS GRANTED	OPTION EXERCISE PRICE (CAD$)	OPTION EXERCISE PRICE (U.S. $)	FAIR VALUE PER SHARE (U.S. $)
January 1, 2013	823,400	0.55	0.55	1.07
January 2, 2013	1,500	0.55	0.55	1.08
January 7, 2013	500	0.55	0.56	1.08
January 14, 2013	200,000	0.55	0.56	1.08
January 28, 2013	3,000	0.55	0.55	1.05
February 10, 2013	3,000	0.55	0.55	1.06
February 11, 2013	5,000	0.55	0.55	1.05
March 10, 2013	150,000	0.55	0.54	1.03
April 1, 2013	750	0.55	0.54	1.98
April 25, 2013	20,000	0.55	0.54	1.97
April 28, 2013	5,000	0.55	0.54	1.98
June 16, 2013	2,000	0.55	0.54	1.98
August 1, 2013	207,000	2.01	1.94	1.94
January 14, 2014	764,000	2.22	2.03	2.03
February 2, 2014	2,000	2.22	2.00	2.00
July 28, 2014	18,000	2.31	2.14	2.14
August 5, 2014	12,500	2.31	2.11	2.11

The exercise prices of our options are denominated in Canadian dollars. Except as indicated above, the exercise prices in the chart above have been translated to U.S. dollars at the exchange rate in effect on the applicable grant date.

The fair value determinations as of January 1, 2013 and June 30, 2013 were determined retrospectively by the Committee and our board of directors having considered and with reference to a report prepared by an independent third-party valuation firm utilizing the option pricing method, or OPM. In connection with the assessment, we performed a probability-weighted analysis of the different valuations expected for the common shares in the event that we complete an IPO as well as in the alternative. Such an analysis may be considered to be part of the Probability-Weighted Expected Return Method, or PWERM, methodology.

OPM analyzes the value of each class of security by treating it as a call option on a portion of the future value of a business. Under this method, the common shares have value only if the funds available for distribution to shareholders exceed the value of the liquidation preference at the time of a liquidity event (for example, in a merger or sale), assuming the enterprise has funds available to make a liquidation preference meaningful and collectible by the shareholders. OPM values each equity class by creating a series of call options on our equity value, with exercise prices based on the liquidation preferences, participation rights, and strike prices of derivatives. This method is generally preferred when future outcomes are difficult to predict and dissolution or liquidation is not imminent.

With respect to our determination of fair value as of January 1, 2013, our board of directors determined the fair value with reference to the valuation report, which was prepared based on a blend of the income and market approach with a two-thirds weighting for the income approach and a one-third weighting for the market approach. We considered this weighting appropriate given our stage of development as it considers our projected growth rate and financial projections while considering the enterprise value for similar public companies. In the report, the equity value was allocated using a time to sale event of three years and time to IPO of one year, using a discount rate of 33.8%, determined, in part, with reference to a company-specific risk premium accounting for the fact that we had not, among other things: (i) completed clinical trials for our product candidates, (ii) received needed regulatory approvals for commercial sale in important markets and (iii) demonstrated large-scale commercial viability of our products. The report assumed volatility of 70% based on historical trading volatility for our peer group of companies. A discount for lack of marketability, to account for the illiquidity of the common shares, was applied to the indicated common share value to determine the fair value of the shares. The discount was 35% for the sale scenario and 10% for the IPO scenario. The discount for lack of marketability was determined based on qualitative factors such as our expectation of the timing of the liquidity event under both the sale and IPO scenarios, our ability to access additional capital and the resulting dilution, and the degree of risk in the biotechnology industry. Based on these factors, our board of directors concluded that our common shares had a fair value of $1.07 (CAD$1.06) per share on January 1, 2013.

For our June 30, 2013 determination of fair value, we and our valuation firm considered a number of factors including:

- the improving market receptivity for early-stage biotechnology companies, which caused us to consider an IPO;
- the grant by the FDA of orphan drug designation to TV-45070;
- our decision to exercise our license option on XEN701 and commence IND-enabling studies for this product candidate; and
- progress towards our IPO, including engagement of investment bankers, lawyers and accountants and our initial organizational meeting.

For our June 30, 2013 valuation, we estimated enterprise value using a blend of the income and market approaches with a two-thirds weighting for the income approach and a one-third weighting for the market approach, as in our January 1, 2013 valuation. We adjusted our valuation model to increase the probability of an IPO from 30% to 50% to account for an increased probability of an IPO scenario, in light of continued favorable market conditions and the progress we achieved towards a potential initial public offering of our common shares. Additionally, we discounted the common shares using a discount rate of 24.3% and reduced the discount for lack of marketability for the IPO scenario from 10% to 5% given that we believed that we were moving close to a potential exit event through an IPO. We believe that the reduction in discount rate for lack of marketability from the valuation as at January 1, 2013 was consistent with the reduction of the risk and other qualitative factors. We reduced the expected time to IPO from 12 months to 6 months for this valuation while maintaining the expected time to sale scenario at three years. We assumed volatility remained at 70% as in the prior valuation.

Based on the revised assumptions underlying the valuation model and the changes in our business and in the market values of early-stage biotechnology companies, as well as the impact of an increasing enterprise value on the relative value of our common shares as compared to our convertible preferred shares, the Committee and our board of directors, together with management input, determined that the fair value of our common shares had increased to $1.91 (CAD$2.01) per share as of June 30, 2013. For financial reporting purposes, given the lack of company milestones in the second quarter of 2013 that would be expected to materially influence common share value, and given the fact that the concentration of IPO preparation activities and market receptivity improvement occurred in the second quarter of 2013, we conservatively applied this $1.91 (CAD$2.01) value for computation of stock-based compensation expense to our option grants between April 1, 2013 and June 30, 2013. In connection with the stock option grant on August 1, 2013, our board of directors determined that there had been no material change to the fair value of our common shares as of such date.

There were no option grants from August 2, 2013 to December 31, 2013.

For our December 31, 2013 determination of fair value, we and our valuation firm considered a number of factors including:

- the general market receptivity for early-stage biotechnology companies;
- Teva filing an IND with the FDA for the commencement of Phase 2b study for OA;
- Genentech advancing GDC-0276 into IND-enabling studies;
- a decision to discontinue the development of XEN701; and
- progress towards our IPO.

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For our December 31, 2013 valuation, we estimated enterprise value using a blend of the income and market approaches. The probability of an IPO increased from 50% to 60% from the June 30, 2013 valuation. We discounted the common shares using a discount rate of 25.7% and increased the discount for lack of marketability for the IPO scenario from 5% to 10%, given that we had increased the expected time to IPO from six months to nine months from the valuation date and feedback from our advisors that IPO market conditions were not as strong as earlier in the year. We assumed volatility remained at 70% as in the prior valuation. The expected time to sale scenario remained at three years.

Based on the revised assumptions underlying the valuation model and the changes in our business and in the market values of early-stage biotechnology companies, the Committee and our board of directors, together with management input, determined that the fair value of our common shares was equal to $2.09 (CAD$2.22) per share as of December 31, 2013. We applied this $2.09 (CAD$2.22) value for computation of stock-based compensation expense to our option grants between December 31, 2013 and February 2, 2014, as our board of directors determined that there had been no material change to the fair value of our common shares between December 31, 2013 and the dates of the option grants.

There were no option grants from February 3, 2014 to June 30, 2014.

For our June 30, 2014 determination of fair value, we and our valuation firm considered a number of factors including:

- the general market receptivity for early-stage biotechnology companies and the IPO market in general;
- Teva commencing the Phase 2b study for OA;
- Genentech advancing GDC-0276 towards an IND filing; and
- progress towards our IPO.

For our June 30, 2014 valuation, we estimated enterprise value using a blend of the income and market approaches. The probability of an IPO remained unchanged from the December 30, 2013 valuation at 60%. We discounted the common shares using a discount rate of 19.4% and decreased the discount for lack of marketability for the IPO scenario from 10% to 5%, given that we had decreased the expected time to IPO from nine months to five months from the valuation date. We assumed volatility remained at 70% as in the prior valuation. The expected time to sale scenario remained at three years.

Based on the revised assumptions underlying the valuation model and the changes in our business and in the market values of early-stage biotechnology companies, the Committee and our board of directors, together with management input, determined that the fair value of our common shares was equal to $2.17 (CAD$2.31) per share as of June 30, 2014.

Based on the assumed initial public offering price of $ per common share (the midpoint of the price range set forth on the cover page of this prospectus), the aggregate intrinsic value of stock options outstanding as of June 30, 2014 was $ million, of which $ million relate to vested options and $ million to unvested options.

The following table summarizes the share-based compensation expense recorded for the periods shown (in thousands):

	YEAR ENDED DECEMBER 31,			SIX MONTHS ENDED JUNE 30	
	2011	2012	2013	2013	2014
				(unaudited)	
Research and development	$ 145	$ 112	$ 147	$ 70	$ 96
General and administrative	290	294	428	203	277
Total	$ 435	$ 406	$ 575	$ 273	$ 373

Results of Operations

Comparison of Six Months Ended June 30, 2013 and 2014

The following table summarizes the results of our operations for the six months ended June 30, 2013 and 2014, together with changes in those items (in thousands):

	SIX MONTHS ENDED JUNE 30,		CHANGE 2013 VS. 2014 INCREASE/(DECREASE)
	2013	2014	
	(unaudited)		
Collaboration revenue	$ 10,985	$ 10,297	$ (688)
Royalties	—	2	2
Research and development expenses	6,983	5,099	(1,884)
General and administrative expenses	2,828	2,790	(38)
Other:			
Interest income	76	278	202
Interest (expense)	(41)	—	41
Foreign exchange gain (loss)	1,920	(85)	(2,005)
Gain (loss) on write-off and disposal of assets	11	—	(11)
Net income (loss)	$ 3,140	$ 2,603	$ (537)

Revenue

We recognized revenue of $10.3 million for the six months ended June 30, 2014 compared to $11.0 million for the six months ended June 30, 2013, a decrease of $0.7 million. The decrease was primarily attributable to a $0.6 million decrease resulting from the change in the foreign exchange rate between the U.S. and Canadian dollar, a $0.2 million decrease in research funding from Genome BC as the agreement with Genome BC expired in late 2013 and a $0.1 million decrease in FTE funding from Teva. This was partially offset by the recognition of $0.2 million of the upfront payment received from Genentech for the pain genetics collaboration entered into in March 2014.

Research and Development Expenses

The following table summarizes our research and development expenses for the six months ended June 30, 2013 and 2014, together with changes in those items (in thousands):

	SIX MONTHS ENDED JUNE 30,		CHANGE 2013 VS. 2014 INCREASE/(DECREASE)
	2013	2014	
	(unaudited)		
Teva collaboration (TV-45070) expenses	$ 482	$ 534	$ 52
Genentech collaboration (GDC-0276 and Genetics) expenses	2,358	2,571	213
Other collaboration expenses	89	—	(89)
Preclinical and discovery program expenses	4,054	1,994	(2,060)
Total research and development expenses	$ 6,983	$ 5,099	$ (1,884)

Research and development expenses were $5.1 million for the six months ended June 30, 2014 as compared to $7.0 million for the six months ended June 30, 2013. The decrease of $1.9 million was primarily attributable to a $2.1 million decrease in preclinical and discovery program expenses consisting of a decrease of $3.0 million for XEN701 which was discontinued in late 2013, partially offset by an increase in spending of $0.9 million for our other early stage research programs. This decrease was partially offset by Genentech collaboration expenses which increased by $0.2 million primarily resulting from costs incurred for the pain genetics collaboration entered into in March 2014.

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General and Administrative Expenses

The following table summarizes our general and administrative expenses for the six months ended June 30, 2013 and 2014, together with changes in those items (in thousands):

	SIX MONTHS ENDED JUNE 30,		CHANGE 2013 VS. 2014 INCREASE/(DECREASE)
	2013	2014	
	(unaudited)		
General and administrative expenses	$ 2,828	$ 2,790	$ (38)

General and administrative expenses were $2.8 million for both the six months ended June 30, 2014 and the six months ended June 30, 2013.

Other Income (Expense)

The following table summarizes our other income (expense) for the six months ended June 30, 2013 and 2014, together with changes in those items (in thousands):

	SIX MONTHS ENDED JUNE 30,		CHANGE 2013 VS. 2014 INCREASE/(DECREASE)
	2013	2014	
	(unaudited)		
Other income (expense):	$ 1,966	$ 193	$ (1,773)

Interest income was $0.3 million for the six months ended June 30, 2014 as compared to $0.1 million for the six months ended June 30, 2013, an increase of $0.2 million. This increase was primarily attributable to an increase in interest rates and balances of savings accounts.

We recognized a foreign exchange loss of $0.1 million for the six months ended June 30, 2014 as compared to a foreign exchange gain of $1.9 million for the six months ended June 30, 2013. The foreign exchange gain in 2013 was due to the increased Canadian dollar to U.S. dollar exchange rate.

Comparison of Years Ended December 31, 2012 and 2013

The following table summarizes the results of our operations for the years ended December 31, 2012 and 2013 together with changes in those items (in thousands):

	YEAR ENDED DECEMBER 31,		CHANGE 2012 VS. 2013 INCREASE/(DECREASE)
	2012	2013	
Collaboration revenue	$ 14,300	$ 27,352	$ 13,052
Royalties	8	4	(4)
Research and development expenses	10,455	12,302	1,848
General and administrative expenses	7,006	5,341	1,665
Other:			
Interest income	144	338	194
Interest (expense)	(93)	(64)	29
Foreign exchange gain (loss)	(169)	2,035	2,204
Gain (loss) on write-off and disposal of assets	(1,030)	11	1,041
Net income (loss)	$ (4,301)	$ 12,032	$ 16,333

Revenue

We recognized revenue of $27.4 million for the year ended December 31, 2013 compared to $14.3 million for the year ended December 31, 2012, an increase of $13.1 million. The increase was primarily attributable to the recognition of $12.8 million of the upfront payment and research funding from Teva, a $5.1 million milestone payment received from Genentech, $1.0 million in additional FTE funding we received from Genentech, and $0.3 million in non-royalty compensation (related to a payment) from uniQure. This was offset by a $0.5 million decrease in research funding from Genome BC and $5.6 million decrease in revenue from Merck for an option fee, recognition of an upfront payment, and FTE funding related to the research agreement that ended in December 2012.

Research and Development Expenses

The following table summarizes research and development expenses for the years ended December 31, 2012 and 2013 together with changes in those items (in thousands):

	YEAR ENDED DECEMBER 31,		CHANGE 2012 VS. 2013 INCREASE/(DECREASE)
	2012	2013	
Teva collaboration (TV-45070) expenses	$ 1,951	$ 1,005	$ (946)
Genentech collaboration (GDC-0276) expenses	3,652	5,072	1,420
Other collaboration expenses	1,717	133	(1,584)
Preclinical and discovery program expenses	3,135	6,093	2,958
Total research and development expenses	$ 10,455	$ 12,303	$ 1,848

Research and development expenses were $12.3 million for the year ended December 31, 2013 as compared to $10.5 million for the year ended December 31, 2012. The increase of $1.8 million was primarily attributable to a $3.0 million increase in preclinical and discovery program expenses consisting of a $1.5 million increase in spending for XEN701 and a $1.5 million increase in spending for our other early stage research programs. There was also a $1.4 million increase in Genentech collaboration expenses due to an increase in the number of FTEs dedicated to this collaboration. The increases were offset in part by a $1.6 million decrease in other collaboration expenses primarily due to the Merck collaborative research program ending in December 2012 and a $0.9 million decrease in spending for TV-45070 related to Teva's assumption of the development costs of that product candidate as of January 1, 2013.

General and Administrative Expenses

The following table summarizes general and administrative expenses for the years ended December 31, 2012 and 2013 together with changes in those items (in thousands):

	YEAR ENDED DECEMBER 31,		CHANGE 2012 VS. 2013 INCREASE/(DECREASE)
	2012	2013	
General and administrative expenses	$ 7,006	$ 5,341	$ (1,665)

General and administrative expenses were $5.3 million for the year ended December 31, 2013 compared to $7.0 million for the year ended December 31, 2012. This decrease was primarily due to a reduction in intellectual property expenses, the majority of which have been assumed by our collaborators.

Other Income (Expense)

The following table summarizes our other income (expense) for the years ended December 31, 2012 and 2013 together with changes in those items (in thousands):

	YEAR ENDED DECEMBER 31,		CHANGE 2012 VS. 2013 INCREASE/(DECREASE)
	2012	2013	
Other income (expense):	$ (1,148)	$ 2,320	$ 3,468

Interest income was $0.3 million for the year ended December 31, 2013 as compared to $0.1 million for the year ended December 31, 2012, an increase of $0.2 million. The increase was primarily attributable to our increased cash and investment balances from our receipt of $41.0 million in December 2012 from Teva.

We recognized a foreign exchange gain of $2.0 million for the year ended December 31, 2013 as compared to a foreign exchange loss of $0.2 million for the year ended December 31, 2012. The foreign exchange gain in 2013 was due to the increased Canadian dollar to U.S. dollar exchange rate.

We wrote-off leasehold improvements with a net book value of $1.0 million for the year ended December 31, 2012 in connection with a lease extension and modification agreement made effective April 1, 2012. No such item was recorded in the year ended December 31, 2013.

Comparison of Years Ended December 31, 2011 and 2012

The following table summarizes the results of our operations for the years ended December 31, 2011 and 2012 together with changes in those items (in thousands):

	YEAR ENDED DECEMBER 31,		CHANGE 2011 VS. 2012 INCREASE/(DECREASE)
	2011	2012	
Collaboration revenue	$ 6,915	$ 14,300	$ 7,385
Royalties	3	8	5
Research and development expenses	12,302	10,455	(1,847)
General and administrative expenses	6,730	7,006	276
Other:			
Interest income	153	144	(9)
Interest (expense)	(91)	(93)	(2)
Foreign exchange gain (loss)	60	(169)	(229)
Gain (loss) on write-off and disposal of assets	—	(1,030)	(1,030)
Net income (loss)	$ (11,992)	$ (4,301)	$ 7,691

Revenue

We recognized revenue of $14.3 million for the year ended December 31, 2012 as compared to $6.9 million for the year ended December 31, 2011, an increase of $7.4 million. The increase during 2012 was primarily due to an upfront payment and research funding pursuant to our collaboration agreement with Genentech.

Research and Development Expenses

The following table summarizes research and development expenses for the years ended December 31, 2011 and 2012 together with changes in those items (in thousands):

	YEAR ENDED DECEMBER 31, 2011	YEAR ENDED DECEMBER 31, 2012	CHANGE 2011 VS. 2012 INCREASE/(DECREASE)
Teva collaboration (TV-45070) expenses	$ 2,455	$ 1,951	$ (504)
Genentech collaboration (GDC-0276) expenses	3,794	3,652	(142)
Other collaboration expenses	3,301	1,717	(1,584)
Preclinical and discovery program expenses	2,752	3,135	383
Total research and development expenses	$ 12,302	$ 10,455	$ (1,847)

Research and development expenses were $10.5 million for the year ended December 31, 2012 compared to $12.3 million for the year ended December 31, 2011. The decrease was primarily due to a $1.6 million decrease in other collaboration expenses related to the Genome BC and Merck collaborations which ended in December 2011 and 2012, respectively. There was also a $0.5 million decrease for TV-45070 related to Teva's assumption of the development costs of that product candidate as of January 1, 2013.

General and Administrative Expenses

The following table summarizes general and administrative expenses for the years ended December 31, 2011 and 2012 together with changes in those items (in thousands):

	YEAR ENDED DECEMBER 31, 2011	YEAR ENDED DECEMBER 31, 2012	CHANGE 2011 VS. 2012 INCREASE/(DECREASE)
General and administrative expenses	$ 6,730	$ 7,006	$ 276

General and administrative expenses were $7.0 million for the year ended December 31, 2012 compared to $6.7 million for the year ended December 31, 2011, an increase of $0.3 million. The increase was primarily due to an increase in intellectual property expenses associated with our discovery and development programs.

Other Income (Expense)

The following table summarizes our other income (expense) for the years ended December 31, 2011 and 2012 together with changes in those items (in thousands):

	YEAR ENDED DECEMBER 31, 2011	YEAR ENDED DECEMBER 31, 2012	CHANGE 2011 VS. 2012 INCREASE/(DECREASE)
Other income (expense):	$ 122	$(1,148)	$ (1,270)

Interest income for the year ended December 31, 2012 was comparable to interest income for the year ended December 31, 2011 due to similar levels of cash and investment balances for both years.

Interest expense for the year ended December 31, 2012 was comparable to interest expense for the year ended December 31, 2011 due to the similar amount of principal of the note payable to our collaborator, Isis, pursuant to our agreement with them.

We recognized a foreign exchange loss of $0.2 million for the year ended December 31, 2012 compared to a foreign exchange gain of $0.1 million for the year ended December 31, 2011 due to unfavorable exchange rate fluctuation.

We wrote-off leasehold improvements with a net book value of $1.0 million during the year ended December 31, 2012 in connection with a lease extension and modification agreement made effective April 1, 2012. No such item was recorded in the year ended December 31, 2011.

Liquidity and Capital Resources

To date, we have financed our operations primarily through funding received from collaboration and license agreements and private placements of our common and preferred shares, as well as through the receipt of government funding. Through June 30, 2014, we have received an aggregate of approximately $265.2 million to fund our operations, of which approximately $145.7 million was non-equity funding pursuant to collaboration and license agreements, approximately $17.0 million was pursuant to government funding, and approximately $102.5 million was pursuant to the sale of our preferred shares. As of June 30, 2014, we had cash, cash equivalents and marketable securities of $44.7 million.

We have incurred significant operating losses since inception. Our net loss was $12.0 million and $4.3 million for the years ended December 31, 2011 and 2012, respectively. Although we had $12.0 million in net income for the year ended December 31, 2013, and $2.6 million in net income for the six months ended June 30, 2014, we had an accumulated deficit of $114.1 million from inception through June 30, 2014. We expect to continue to incur significant expenses in excess of our revenue and expect to incur operating losses over the next several years. Our net losses may fluctuate significantly from quarter to quarter and year to year. We expect to continue to incur significant expenses and operating losses for the foreseeable future as we continue our research and preclinical and clinical development of our product candidates; expand the scope of our current clinical studies for our product candidates; initiate additional preclinical, clinical or other studies for our product candidates, including under our collaboration agreements; change or add additional manufacturers or suppliers; seek regulatory and marketing approvals for any of our product candidates that successfully complete clinical studies; seek to identify and validate additional product candidates; acquire or in-license other product candidates and technologies; make milestone or other payments under our in-license agreements including, without limitation, our agreements with UBC and the Memorial University of Newfoundland, or MUN; maintain, protect and expand our intellectual property portfolio; attract and retain skilled personnel; establish a sales, marketing and distribution infrastructure to commercialize any products for which we or one of our collaborators may obtain marketing approval, and maintain commercial rights; create additional infrastructure to support our operations as a public company and our product development and planned future commercialization efforts; and experience any delays or encounter issues with any of the above.

Until such time as we can generate substantial product revenue, if ever, we expect to finance our cash needs through a combination of collaboration agreements and equity or debt financings. Except for any obligations of our collaborators to reimburse us for research and development expenses or to make milestone payments under our agreements with them, upon completion of this offering, we will not have any committed external sources of capital. To the extent that we raise additional capital through the future sale of equity or debt, the ownership interest of our shareholders will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect the rights of our existing common shareholders. If we raise additional funds through collaboration agreements in the future, we may have to relinquish valuable rights to our technologies, future revenue streams or product candidates or grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds through equity or debt financings when needed, we may be required to delay, limit, reduce or terminate our product development or future commercialization efforts or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves.

Our future capital requirements are difficult to forecast and will depend on many factors, including:

- whether our existing collaborations continue to generate research funding, milestone payments and royalties to us;
- the number and stage of development of future product candidates that we choose to pursue;
- the scope, progress, results and costs of research and development of our future product candidates independently, and conducting preclinical research and clinical studies;
- the timing and costs involved in obtaining regulatory approvals for any future product candidates we develop independently;

- the cost associated with exercising our co-promotion option for TV-45070 in the U.S., should the opportunity arise and we choose to do so;
- the cost of commercialization activities, if any, of any future product candidates we develop independently that are approved for sale, including marketing, sales and distribution costs;
- the cost of manufacturing our future product candidates and any products we successfully commercialize independently;
- our ability to maintain existing collaborations and to establish new collaborations, licensing or other arrangements and the financial terms of such arrangements;
- the costs of preparing, filing, prosecuting, maintaining, defending and enforcing patents, including litigation costs and the outcome of such litigation; and
- the timing, receipt and amount of sales, or royalties on Glybera, TV-45070, GDC-0276 and our future product candidates, if any.

Based on our research and development plans and our timing expectations related to the progress of our programs, we expect that the net proceeds from this offering, together with our existing cash, cash equivalents and marketable securities as of the date of this prospectus and research funding that we expect to receive under our existing collaborations, will enable us to fund our operating expenses and capital expenditure requirements for at least the next 12 to 24 months. We have based this estimate on assumptions that may prove to be wrong, and we could use our capital resources sooner than we expect. Additionally, the process of testing drug candidates in clinical trials is costly, and the timing of progress in these trials remains uncertain.

Cash Flows

The following table shows a summary of our cash flows for the years ended December 31, 2011, 2012 and 2013 and for the six months ended June 30, 2013 and 2014 (in thousands):

	YEAR ENDED DECEMBER 31,			SIX MONTHS ENDED JUNE 30,	
	2011	2012	2013	2013	2014
				(unaudited)	
Net cash provided by (used in) operating activities	$ (13,689)	$ 45,573	$ (3,322)	$ (5,614)	$ (3,067)
Net cash provided by (used in) investing activities	13,889	491	(11,472)	(68)	1,125
Net cash provided by (used in) financing activities	2	—	(4,391)	(1,697)	(726)

Operating Activities

During the six months ended June 30, 2014, net cash used in operating activities totaled $3.1 million. Our net income of $2.6 million was offset by a significant decrease in deferred revenue and operating liabilities.

During the six months ended June 30, 2013, net cash used in operating activities totaled $5.6 million. Our net income of $3.1 million was offset by a significant decrease in deferred revenue and decrease in other operating assets.

During the year ended December 31, 2013, net cash used in operating activities totaled $3.3 million. Our net income of $12.0 million was offset by a significant decrease in deferred revenue and other changes in working capital.

During the year ended December 31, 2012, operating activities provided $45.6 million of cash. This cash flow from operations resulted from the $41.0 million payment received from Teva and the collection of the $10.0 million receivable for the upfront payment from the Genentech collaboration, partially offset by our net loss of $4.3 million. Our accounts payable and accrued liabilities were affected by the timing of payments to our vendors and additional accruals for our research activities.

During the year ended December 31, 2011, operating activities used $13.7 million of cash, primarily as a result of our net loss for the year of $12.0 million and the net impact of the Genentech collaboration and our recording of the receivable and deferred revenue of the upfront payment of $10.0 million.

Investing Activities

During the six months ended June 30, 2014, net cash provided by investing activities was $1.1 million and consisted primarily of cash received from the sale of marketable securities, partially offset by cash used to purchase property, plant and equipment and marketable securities.

During the six months ended June 30, 2013, net cash used in investing activities was $0.1 million and consisted primarily of purchases of property, plant and equipment.

During the year ended December 31, 2013, net cash used in investing activities was $11.5 million and consisted primarily of purchases of marketable securities of $17.9 million, partially offset by proceeds from marketable securities of $6.6 million.

For the year ended December 31, 2012, net cash provided by investing activities was $0.5 million and consisted primarily of cash received from the sale of marketable securities of $1.0 million, partially offset by purchases of property, plant and equipment of $0.5 million.

For the year ended December 31, 2011, net cash provided by investing activities was $13.9 million and consisted primarily of cash received from the sale of marketable securities of $14.2 million, partially offset by purchases of property, plant and equipment of $0.3 million.

Financing Activities

During the six months ended June 30, 2014, net cash used for financing activities was $0.7 million, which consisted primarily of additional deferred financing costs.

During the six months ended June 30, 2013, net cash used for financing activities was $1.7 million, which consisted of repayment of the note we issued to Isis in connection with our collaboration agreement.

During the year ended December 31, 2013, net cash used for financing activities was $4.4 million, which consisted of $2.7 million in deferred financing costs and $1.7 million for repayment of the note we issued to Isis in connection with our collaboration agreement.

Net cash provided by financing activities for the years ended December 31, 2011 and 2012 were related to the exercise of stock options and was less than $2,000 for each period.

Contractual Obligations and Commitments

The following summarizes our significant contractual obligations as of June 30, 2014 (in thousands):

CONTRACTUAL OBLIGATIONS	TOTAL	LESS THAN 1 YEAR	1 TO 3 YEARS	3 TO 5 YEARS	MORE THAN 5 YEARS
Operating leases (1)	$ 8,568	$ 527	$ 2,106	$ 2,248	$ 3,687

(1) Represents future minimum lease payments under an operating lease in effect as of June 30, 2014 for our current facility in Burnaby, British Columbia, Canada.

The contractual obligations table above excludes potential future payments we may be required to make if we elect to opt into the co-development arrangement under our collaboration with Merck or the co-promotion for TV-45070 under our collaboration with Teva. Our potential payment obligations in the single-digit percentage range to UBC related to amounts we receive from sales of Glybera are also excluded from the table. Additionally, the table does not include our potential royalty and milestone payment obligations to MUN pursuant to the Restated Collaborative Research & License Agreement by and between us and MUN dated December 2006. Pursuant to this agreement, we are obligated to pay MUN certain milestone payments and a single-digit percentage royalty of net sales for products that we sell directly and a single-digit percentage of royalties we receive from sales on products under our pain program.

Inflation

We do not believe that inflation had a material effect on our business, financial condition or results of operations in the last three fiscal years. If our costs were to become subject to significant inflationary pressures, we may be able to offset higher costs through revenue increases. Our inability to do so could harm our business, financial condition and results of operations.

Off-Balance Sheet Arrangements

We do not engage in any off-balance sheet financing activities. We do not have any interest in entities referred to as variable interest entities, which include special purposes entities and other structured finance entities.

Related Party Transactions

For a description of our related party transactions, see "Certain Relationships and Related Party Transactions."

Recent Accounting Pronouncements

In July 2013, the FASB issued ASU 2013-11, Income Taxes (ASC 740) Presentation of an Unrecognized Tax Benefit When a Net Operating Loss Carry forward, a Similar Tax Loss, or a Tax Credit Carry forward Exists (Update). The update is intended to eliminate the diversity in practice of the presentation of an unrecognized tax benefit when a net operating loss carryforward, a similar tax loss, or a tax credit carryforward exists. The update is effective for annual and interim financial statements for fiscal years beginning after December 15, 2013. The amendments should be applied prospectively to all unrecognized tax benefits that exist at the effective date. Retrospective application is permitted. We adopted this standard as of January 1, 2014 and its adoption did not have a material impact on our financial position or results of operations for the six months ended June 30, 2014.

In May 2014, the FASB issued amendments to develop a common revenue standard for U.S. GAAP. These amendments provide the following: a) remove inconsistencies and weaknesses in revenue requirements, b) provide a more robust framework for addressing revenue issues, c) improve comparability of revenue recognition practices across entities, industries, jurisdictions, and capital markets, d) provide more useful information to users of financial statements through improved disclosure requirements, and e) simplify the preparation of financial statements by reducing the number of requirements to which an entity must refer. These amendments will be effective for public entities for reporting periods beginning after December 15, 2016. We are in the process of evaluating the impact of the adoption of the amendments on the Company's financial position, results of operations and cash flows.

The Jumpstart Our Business Startups Act of 2012, or JOBS Act, provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. This allows an emerging growth company to delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. However, we are choosing to "opt out" of such extended transition period, and as a result, we will comply with new or revised accounting standards on the relevant dates on which adoption of such standards is required for non-emerging growth companies. Section 107 of the JOBS Act provides that our decision to opt out of the extended transition period for complying with new or revised accounting standards is irrevocable.

Quantitative and Qualitative Disclosure About Market Risk

We are exposed to various market risks in the ordinary course of our business, including changes in interest rates and currency exchange rates. Market risk is the potential loss arising from adverse changes in interest rates and exchange rates.

Foreign Currency Exchange Risk

The principal market risk we face is foreign currency exchange rate risk. We face this risk, in part, as a result of entering into transactions denominated in currencies other than Canadian dollars, particularly those denominated in U.S. dollars and Euros. We also hold non-Canadian dollar denominated cash and cash equivalents, accounts receivable and accounts payable, which are primarily denominated in U.S. dollars.

Changes in foreign currency exchange rates can create significant foreign exchange gains or losses to us. Our current foreign currency risk is primarily with the U.S. dollar as a majority of our non-Canadian dollar denominated expenses are denominated in U.S. dollars. To limit our exposure to volatility in currency markets, we estimate our anticipated expenses that will be denominated in currencies other than the Canadian dollar and then purchase a corresponding amount of the relevant foreign currency at the current spot rate. Once these estimated expense amounts are acquired, we do not hedge our exposure and thus assume the risk of future gains or losses on the amounts of foreign currency held. The impact of an adverse change in foreign exchange rates may be offset in the event we receive a milestone payment from a foreign collaborator. At June 30, 2014, we held cash and cash equivalents of $8.4 million denominated in U.S. dollars. A hypothetical 10% increase (decrease) in the value of the U.S. dollar would result in a foreign exchange gain (loss) of $0.8 million being recorded in the Statement of Operations on the translation of these U.S. dollar cash and cash equivalent balances into the Canadian dollar functional currency.

Interest Rate Risk

An additional market risk we face is interest rate risk. We had cash, cash equivalents and marketable securities of $44.7 million as of June 30, 2014. The goals of our investment policy are liquidity and capital preservation; we do not enter into investments for trading or speculative purposes and have not used any derivative financial instruments to manage our interest rate exposure. We believe that we do not have any material exposure to changes in the fair value of these assets as a result of changes in interest rates due to the short term nature of our cash, cash equivalents and marketable securities. Declines in interest rates, however, would reduce future investment income. A 10% change in interest rates during any of the periods presented would not have had a material impact on our financial statements. Such interest-earning instruments carry a degree of interest rate risk. We had no outstanding debt as of June 30, 2014.

BUSINESS

Overview

We are a clinical-stage biopharmaceutical company discovering and developing a pipeline of differentiated therapeutics for orphan indications that we intend to commercialize on our own, and for larger market indications that we intend to partner with global pharmaceutical companies. We have built a core enabling discovery platform for the discovery of validated drug targets by studying rare human diseases with extreme traits, including diseases caused by mutations in ion channels, known as channelopathies. We have an integrated platform that includes in-house capabilities for human genetics, small molecule drug discovery, and pre-clinical and clinical development.

Our business was founded on our proprietary discovery platform, which we refer to as Extreme Genetics. Extreme Genetics involves the study of families where individuals exhibit inherited severe traits, or phenotypes. By identifying and characterizing single-gene defects responsible for these phenotypes, we gain insights into human disease biology to better select targets for therapeutic intervention. Our Extreme Genetics discovery platform has yielded the first approved gene therapy product in the European Union, or the EU, a broad development pipeline and multiple pharmaceutical partnerships.

Our pharmaceutical partners include Teva Pharmaceutical Industries, Ltd., or Teva (through its subsidiary, Ivax International GmbH), Genentech, Inc., or Genentech, and Merck & Co., Inc., or Merck (through its affiliate, Essex Chemie AG). Our pharmaceutical collaborations have generated in aggregate over $140.0 million in non-equity funding to date with the potential to provide us with over $1.0 billion in future milestone payments, as well as royalties and co-promotion income on product sales.

To date, our Extreme Genetics discovery platform has yielded:

- Glybera, developed by our licensee uniQure Biopharma B.V., or uniQure, the first, and currently the only, gene therapy approved in the EU for the treatment of the orphan disorder lipoprotein lipase deficiency, or LPLD;
- TV-45070 (formerly XEN402), a product candidate with four Phase 2 proof-of-concept clinical trials completed. Our partner Teva is conducting a 300-patient, randomized Phase 2b clinical trial in osteoarthritis, or OA, of the knee and is planning clinical development in neuropathic pain indications, including postherpetic neuralgia, or PHN;
- GDC-0276, a product candidate being developed in collaboration with Genentech for the treatment of pain. In August 2014, Genentech received approval from Health Canada to initiate a Phase 1 clinical trial for GDC-0276; and
- pre-clinical programs including a sodium channel inhibitor for the orphan disorder Dravet Syndrome, or DS, and XEN801, a stearoyl Co-A desaturase, or SCD1, inhibitor for the treatment of acne. We anticipate filing an investigational new drug application, or IND, for XEN801 in the first half of 2015 and an IND for our DS program in 2016.

We believe our Extreme Genetics discovery platform enhances the likelihood of discovering a drug target that has a major effect in humans. From these discoveries, we can gain an improved understanding of how a drug that modulates the target might act when given to a human.

The selection of suitable families with rare phenotypes is integral to our successful identification of single-gene defects. Such families are rare and dispersed throughout the world, which makes accessing and studying such families a challenge. We have developed internal clinical genetics expertise allowing us to identify and access rare families. To date, we have established a global network that has included more than 30 clinical collaborations in multiple countries. We collect DNA and detailed clinical information from the selected families to which we then apply our in-house genetics, molecular biology and bioinformatics capabilities to identify the single-gene defect. Using these genetic insights, we apply our in-house, small-molecule expertise as well as access other therapeutic modalities, with the goal of developing novel medicines.

A significant focus of our Extreme Genetics discovery platform has been human channelopathies. This focus has enabled us to develop strong capabilities in small-molecule ion channel drug discovery. Our ion channel discovery capability is based on our understanding of the genetics of channelopathies combined with our proprietary medicinal chemistry assets and know-how. We have been able to discover new binding sites on ion channels which, in turn, has led to the discovery of highly-selective voltage-gated ion channel inhibitors, which may have safety and efficacy advantages over non-selective inhibitors.

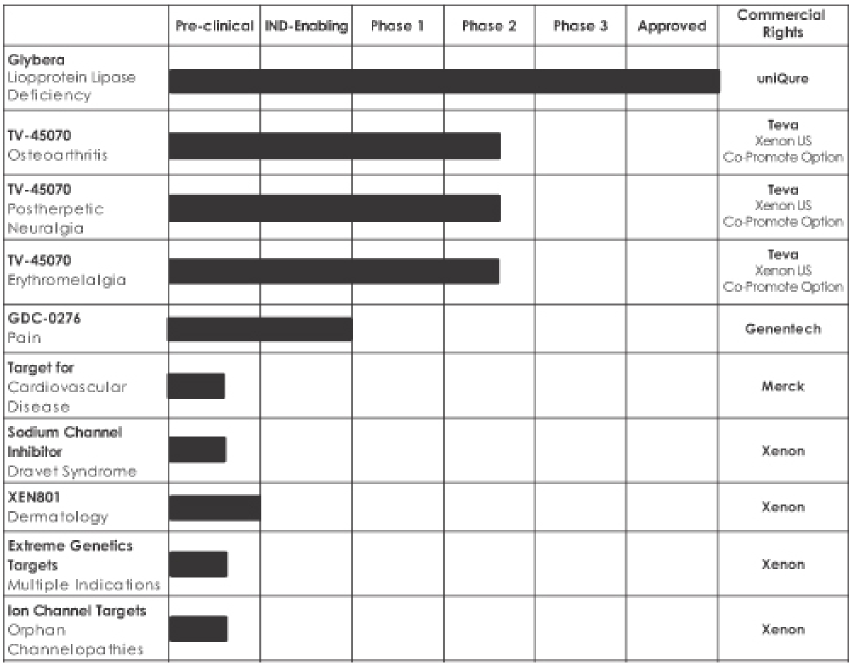
While the pharmaceutical industry has shown interest in channelopathies, a general inability to target ion channels selectively with a pharmaceutical agent has been a limitation to the development of effective therapeutics. The efficacy of non-selective ion channel inhibitors has generally been limited by the adverse events observed at high doses due to the broad non-selective binding of such agents. We believe we have developed a core competence in developing highly-selective small-molecule ion channel inhibitors, and we believe we can use this know-how to develop a pipeline of novel ion channel inhibitors for diseases in areas of high unmet medical need.

We discovered that deficiency of the voltage-gated sodium channel Nav1.7 is present in the rare human disease called congenital indifference to pain, or CIP. Individuals with CIP are unable to feel pain. This relationship indicated that Nav1.7 may be a key mechanism for the development of novel analgesics. We are pursuing this mechanism in separate partnerships with Teva and with Genentech.

Similarly, with our collaborators from McGill University, we identified the genetic link between rare human epilepsies and mutations in the Nav1.1 sodium channel. These genetic epilepsy discoveries helped to define our therapeutic selective ion channel strategy for DS. We believe that our Extreme Genetics discovery platform provides the opportunity to validate additional ion channel targets for both prevalent and orphan indications.

Our Pipeline

The following is a summary of our current product pipeline:



Approved Product

Glybera

Glybera is the first and currently the only gene therapy product to receive commercial approval in the EU. It is specifically indicated for the treatment of a subset of adult patients with the orphan lipid disorder LPLD, confirmed by genetic testing and suffering from severe or multiple pancreatitis attacks, despite dietary fat restrictions. LPLD is a severe metabolic disease of inadequate lipid metabolism resulting in pancreatitis and in some cases, death. Together with collaborators from the University of British Columbia, or UBC, we demonstrated that humans with a single gene variant of the lipoprotein lipase, or LPL, gene called LPL^{S447X}, resulted in increased LPL enzyme activity leading to reduced triglyceride levels. Under our sublicense and research agreement with uniQure, we collaborated with uniQure and UBC on pre-clinical activities, and thereafter uniQure developed an LPL gene therapy product, Glybera, which contains the LPL^{S447X} variant. We believe that the introduction of the therapeutic LPL^{S447X} gene through administration of Glybera provides a clinical benefit for a subset of LPLD patients.

Glybera is the first product whose active ingredient was derived from our platform to receive commercial approval. The goal of Glybera therapy is to treat LPLD in order to achieve sustained improvement of clearance of triglyceride-rich lipid particles known as chylomicrons, and to significantly reduce the risk of pancreatitis attacks in patients suffering from multiple recurrent pancreatitis and abdominal pain events. Glybera was developed by our licensee, uniQure. In 2012, Glybera was approved in the EU, and in July 2013, uniQure announced that it had entered into a partnership with Chiesi Farmaceutici S.p.A., or Chiesi, for the commercialization of Glybera in the EU and more than a dozen other countries including Brazil, China, Mexico and Russia. We believe that Chiesi plans to launch Glybera in the fourth quarter of 2014 or the first quarter of 2015 in Europe, and that uniQure is pursuing a U.S. product approval strategy, with plans to file a Biologics License Application, or BLA, with the U.S. Food and Drug Administration, or the FDA, in 2017. Glybera has received both fast track and orphan drug designations for the treatment of LPLD in both the EU and the U.S.

We are eligible to receive mid single-digit royalties on net sales of the licensed products, for sales made by uniQure and its affiliates. The royalty rates are reduced to a low single-digit for sales made by uniQure and its affiliates in countries where a licensed technology or a licensed product is not covered by a valid patent claim. With respect to uniQure’s sublicense to Chiesi, we are eligible to receive a percentage in the low twenties of all non-royalty compensation relating to the licensed technology or products that uniQure receives from Chiesi (for example upfront payments and milestone payments), a percentage in the low twenties of any royalties that uniQure receives from Chiesi based on sales of technology or products covered by the licensed patents, plus a mid single-digit percentage of certain further royalties that uniQure receives from Chiesi based on sales of our licensed technology or products after the expiration of all licensed patents covering the product.

Product Candidates in Development

TV-45070 for the Treatment of Pain

TV-45070 (formerly XEN402) is a small-molecule inhibitor of the sodium channel Nav1.7 and other sodium channels, including those that are expressed in the pain-sensing peripheral nervous system. TV-45070 has potentially broad application in nociceptive pain, mediated by damage or injury to tissues, including the pain sensitivity caused by inflammation, and neuropathic pain mediated by damage, dysfunction or injury of nerves. TV-45070 is partnered with Teva. Pursuant to the terms of the agreement, Teva is obligated to complete three Phase 2 or later stage clinical trials. Using a topical ointment formulation of TV-45070, Teva has initiated a 300-patient, randomized Phase 2b clinical trial in OA of the knee with data expected in the third quarter of 2015. Teva is also developing topical TV-45070 in neuropathic pain indications, and is planning a Phase 2b clinical trial in patients with PHN that is expected to start in the first half of 2015. In addition, we are working with Teva to evaluate the opportunity to develop TV-45070 for the orphan disease erythromelalgia, or EM. TV-45070 has received orphan designation from the FDA for the treatment of EM. We selected Nav1.7 as a drug target after we discovered that the Nav1.7 protein is deficient in the rare human disease called congenital indifference to pain, or CIP, where humans suffering from CIP are unable to feel pain. We have observed promising evidence of activity for TV-45070 in four Phase 2 proof-of-concept clinical trials, including two trials in EM, one trial in PHN and one trial in dental pain, a form of nociceptive pain.

In December 2012, we entered into a collaborative development and license agreement with Teva, through its subsidiary, Ivax International GmbH, or Ivax, pursuant to which we granted Teva an exclusive worldwide license to develop and commercialize TV-45070. Prior to our entry into the collaborative development and license agreement with Teva, we submitted INDs to the FDA for oral TV-45070 for the indication of dental pain (July 2009) and topical TV-45070 for the indication of acute and chronic pain, including neuropathic and inflammatory pain (July 2010). Teva submitted an IND to the FDA for topical TV-45070 for the symptomatic treatment of OA (November 2013). Under the terms of the agreement, Teva made an upfront payment to us of $41.0 million. In addition, we are eligible to receive potential milestone payments totaling up to $335.0 million, comprised of a $20.0 million clinical milestone payment, up to $285.0 million in regulatory milestone payments, and a $30.0 million sales-based milestone payment. If TV-45070 is approved, we are also eligible to receive royalties in the low teens to the low twenties on net sales of the licensed products for the timeframe that such products are covered by the licensed patents and in certain other instances. We also have an option to co-promote products in the U.S.

GDC-0276 and Other Selective Inhibitors of Nav1.7 for the Treatment of Pain

In December 2011, we entered into a collaborative research and license agreement with Genentech and its affiliate, F. Hoffmann-La Roche Ltd, or Roche, to discover and develop selective oral inhibitors of Nav1.7 for the treatment of pain. Based on our discovery of Nav1.7 deficiency underlying CIP, we believe that Nav1.7 is a highly-validated target for the treatment of pain. Our Genentech collaboration is focused on discovering and developing selective oral Nav1.7 inhibitors, which is in contrast to our Teva partnership that is focused on developing a topical drug that targets a number of different sodium channels, including Nav1.7. The first small molecule, pre-clinical product candidate that was selected for development under our collaboration is GDC-0276. In August 2014, Genentech received approval from Health Canada to initiate a Phase 1 clinical trial for GDC-0276.

Under the terms of the agreement, Genentech paid us an upfront fee of $10.0 million, a $5.0 million milestone payment for the selection of GDC-0276 for development and an $8.0 million milestone payment was earned upon the approval by Health Canada of the Clinical Trial Application, or CTA, for GDC-0276. We are also eligible to receive pre-commercial and commercial milestone payments with respect to the licensed products totaling up to an additional $613.0 million, comprised of up to $45.5 million in pre-clinical and clinical milestone payments, up to $387.5 million in regulatory milestone payments, and up to $180.0 million in sales-based milestone payments for multiple products and indications. In addition, we are also eligible to receive royalties based on net sales of the licensed products, which range from a mid single-digit percentage to ten percent for small-molecule inhibitors for the timeframe that such products are covered by the licensed patents and a low single-digit percentage thereafter, plus a low single-digit percentage for large-molecule inhibitors of Nav1.7.

Chronic pain conditions, such as severe cancer pain and neuropathic pain, are generally recognized as unmet medical needs providing potential commercial opportunities for a new oral pain drug. Currently available pain drugs often have either a lack of meaningful pain relief or dose-limiting side effects for many patients. An orally administered selective Nav1.7 inhibitor could present a novel mechanism for the treatment of moderate to severe pain as a single agent or in combination with existing analgesics that work through different mechanisms.

Product Candidates in Discovery

Selective Small-Molecule Sodium Channel Inhibitors for the Treatment of Dravet Syndrome

We are developing selective inhibitors of the voltage-gated sodium channel Nav1.6 as a treatment for the orphan disease Dravet Syndrome, or DS. We have developed considerable expertise in voltage-gated sodium channel biology and have accumulated significant experience in the development of selective sodium channel inhibitors. We are leveraging this expertise and chemistry know-how for the development of selective inhibitors of Nav1.6. for the treatment of DS.

DS is a severe form of childhood epilepsy that typically causes mental retardation and, in approximately 10% of cases, premature death before the age of 12 years. The frequency of DS in the U.S. has been estimated to be one in 20,000 to 40,000 births, which, when applied to U.S. federal census data, correlates to approximately 7,500 to 15,000 patients with DS in the U.S.

With our collaborators from McGill University, we identified the genetic link between rare human epilepsy and mutations in the Nav1.1 gene. It is now estimated that approximately 80% of DS cases are believed to be due to mutations in one copy of the Nav1.1 voltage-gated sodium channel that cause a partial loss of Nav1.1 function. Nav1.1 plays a critical role in the normal functioning of inhibitory pathways in the brain. The lack of fully functioning Nav1.1 and inhibitory pathways allows the brain excitatory pathways to be unopposed resulting in the severe seizures of DS. The brain excitatory pathways are preferentially mediated by the voltage-gated sodium channel Nav1.6, and therefore if we are able to selectively inhibit Nav1.6 with a small-molecule compound, we expect to taper this neuronal excitation and thereby treat DS. To further support inhibiting Nav1.6 as a potential therapeutic approach to treat DS, published data has shown that seizures and premature death observed in a DS mouse model can be corrected when these animals are bred with a Nav1.6 knockout mouse.

DS is one of the most resistant epilepsies to treatment. Some benefit has been reported for drugs that increase the activity of the inhibitory brain pathways such as benzodiazepines and Stiripentol, while non-selective sodium channel blockers such as lamotrigine are contraindicated as they may worsen seizures due to further inhibition of Nav1.1. Other intractable childhood seizures that have been associated with genetically-linked partial loss of function of Nav1.1 and may benefit from a selective inhibitor of Nav1.6 include intractable childhood epilepsy with generalized tonic-clonic seizures and sporadic infantile epileptic encephalopathy.

Based on our experience and know-how in developing selective ion channel inhibitors, we have identified potent, selective Nav1.6 inhibitors. We expect to have pre-clinical proof-of-concept data in the second half of 2014 in animal models of DS. We anticipate filing an IND for a drug candidate to treat DS in 2016. Given the orphan nature of this disorder, we believe that DS may represent an attractive opportunity for us to advance independently.

XEN801 for the Treatment of Acne

XEN801 is a selective, small molecule inhibitor of SCD1 being developed for the treatment of moderate to severe acne. SCD1 is an enzyme involved in lipid synthesis that is expressed in sebaceous glands in the skin. Mice deficient in SCD1 have a marked phenotype of sebaceous gland atrophy suggesting that inhibition of SCD1 activity in the skin may provide a novel treatment option for disorders of enlarged or overactive sebaceous glands, including acne. We have discovered and developed novel small-molecule SCD1 inhibitors to which we have sole rights. In multiple animal models, we have shown that our SCD1 inhibitors can reduce the size and number of sebaceous glands. XEN801 has demonstrated good properties for topical administration including formulation in a light gel and adequate skin penetration in multiple animal species.

We anticipate selecting a development candidate for IND-enabling studies in the second half of 2014 and filing an IND in the first half of 2015 to initiate initiating clinical development. We believe a selective, small-molecule inhibitor of SCD1 has therapeutic potential for skin disorders such as moderate to severe acne, seborrhoea and sebaceous hyperplasia.

Selective Small-Molecule Inhibitors of Targets for the Treatment of Cardiovascular Disease

We entered into a collaborative research and option agreement with Merck in June 2009 to discover novel targets and compounds for the treatment of cardiovascular disease using our Extreme Genetics discovery platform. In 2012, Merck exercised its option to obtain an exclusive license to a target for cardiovascular disease and compound inhibitors that were discovered during the research collaboration. The target, when inhibited, is predicted to provide a beneficial lipid profile with the goal of protecting from cardiovascular disease.

New Pipeline Opportunities

Given the commercial opportunity and the pharmaceutical industry's interest in the pain market, we are using our Extreme Genetics discovery platform and specialized insights into the biology of pain to identify new drug targets for this common medical problem. We formed a second collaboration with Genentech in March 2014 for pain genetics, pursuant to which we intend to focus on rare phenotypes where individuals have an inability to perceive pain or where individuals have non-precipitated spontaneous severe pain. We believe these phenotypes may unlock new key molecular regulators of pain signaling in humans, which we will seek to validate as targets for new pain drugs. For example, we are analyzing CIP families that are not explained by Nav1.7 deficiency as well as families with severe pain phenotypes, such as paroxysmal extreme pain disorder, or PEPD, and inherited EM. In addition to our study of rare human disorders of extreme pain or the absence of pain, we are studying other rare disorders with extreme phenotypes that we believe could yield new drug targets in disorders where high medical need exists, such as neurological disorders like essential tremor and cluster headache.

In addition, given our expertise in ion channel drug discovery, we are also focusing our discovery efforts on the identification of ion channel targets where we believe novel selective inhibitors might represent significant therapeutic advances with a focus on orphan indications.

Our Strategy

Our goal is to build a self-sustaining, fully-integrated and profitable company that discovers, develops and commercializes innovative therapeutics, including novel selective ion channel inhibitors, by applying our expertise in the genetics of rare human diseases.

Since our inception, we believe we have operated in a capital-efficient manner to build our capabilities and assets through phased growth, expansion and value creation. Since our last venture capital financing in 2006, we have funded our operations and expanded our platform, product pipeline and infrastructure through a strategy which combines the deployment of our own resources and the establishment of broadly enabling and well-structured pharmaceutical partnerships with industry leaders.

Our strategy is to:

- *Expand our pipeline and advance multiple discovery and development programs, focusing on orphan and niche disease market opportunities that we can independently develop and commercialize.* We believe that focusing on orphan indications will allow us to benefit from both a less costly and expedited development pathway and may provide us with potential commercial benefits, including market exclusivity and premium drug pricing. This focus may also allow us to retain a significantly larger share of the value of such product candidates, as it may be viable for us to develop these assets independently. To prepare for this independent development, we intend to build a late-stage development and commercialization infrastructure. Our goal is to expand our development and regulatory capabilities to enable us to conduct clinical trials, including late-stage testing beyond Phase 2 trials, in selected orphan indications. Where we expect to be able to cost-effectively commercialize approved products in orphan markets, we intend to build a specialized sales force.
- *Selectively establish additional partnerships enabling us to access large commercial indications while leveraging the benefits of those collaborations to expand our internal capabilities.* Through our collaboration with Teva, we have gained access to significant late-stage development resources for topical TV-45070 with a pharmaceutical company that has an established commercial franchise in the large pain therapeutics market. This collaboration provided us with a significant upfront payment, the opportunity to achieve substantial additional milestone payments, most of which are for pre-commercial activities, and recurring royalties and potential commercial participation through an option for a co-promotion interest.

  Through our collaboration with Genentech, we have gained access to Genentech's established development resources and commercialization capabilities to advance our oral Nav1.7 blocker, and strengthened our expertise in the chemistry of selective ion channel inhibitors and our ion channel drug discovery infrastructure. Our collaboration with Genentech enables a broader and potentially more efficient development pathway than we could have achieved independently in the competitive Nav1.7 drug development space. We have increased the scope of our relationship with Genentech by establishing a second collaboration that seeks to use our Extreme Genetics discovery platform to identify new drug targets for pain drugs. This collaboration may enable us to pursue a larger discovery effort and to compete more effectively by combining Genentech's expertise with our own and, if successful, may lead to future joint drug discovery collaborations.
- *Further leverage our discovery platform and insights into disease biology to identify novel targets and develop next-generation products.* Our Extreme Genetics discovery platform enables us to discover biologically relevant drug targets. By identifying and studying rare individuals and families with severe phenotypes, we can potentially discover single-gene defects and obtain critical insights into the genes underlying these diseases and their related biology. This information enables us to initiate our drug discovery efforts with the advantage of having a better understanding of the role of the drug target in human disease. We believe that our Extreme Genetics discovery platform for target selection is differentiated and advantageous to other target selection methods commonly employed in the industry, as it has previously identified genes that are determinant or causal of a disease.

Our ion channel discovery capability is founded upon our understanding of the genetics of channelopathies combined with our proprietary medicinal chemistry assets and know-how. We have been able to identify new binding sites on ion channels which, in turn, has led to the discovery of highly-selective, voltage-gated ion channel inhibitors which may have safety and efficacy advantages over non-selective inhibitors. We discovered that deficiency of the voltage-gated sodium channel Nav1.7 is present in CIP. Individuals with CIP are unable to feel pain. This relationship indicated that Nav1.7 may be a key mechanism for the development of novel analgesics. We are pursuing this mechanism in separate partnerships with Teva and with Genentech.

Similarly, with our collaborators from McGill University, we identified the genetic link between rare human epilepsies and mutations in the Nav1.1 sodium channel. These genetic epilepsy discoveries helped to define our therapeutic selective ion channel strategy for the orphan disease DS. Through our Extreme Genetics discovery platform, we believe we have the opportunity to validate additional ion channel targets for both prevalent and orphan indications.

Our Extreme Genetics Discovery Platform

Despite advances in medical sciences and the pharmaceutical industry's understanding of diseases, research and development productivity in the industry has declined over the years. We believe that a contributor to this problem is the industry's reliance on drug discovery approaches that are sometimes based on targets that do not necessarily have a major biological effect in humans. Consequently, it is fairly common for a pharmaceutical company to invest substantial time, resources and funds into drug development only to realize in late-stage clinical trials that a product candidate may be directed to a target that is either not biologically relevant to the disease or that may have diverse functions or effects in humans, thereby leading to poor efficacy or safety.

Our Extreme Genetics discovery platform enables us to identify drug targets that may be more biologically relevant in humans. Our platform is built on the foundation of identifying and studying rare individuals and families with severe phenotypes to discover single-gene defects that have major biological effects in humans. By studying these individuals and families with severe phenotypes, we can obtain critical insights into the genes underlying these diseases and their related biology to develop promising product candidates. We therefore are able to initiate our drug discovery with the advantage of having a greater understanding of the role of the drug target in human disease.

Our reliance on our Extreme Genetics discovery platform for target selection differs from other target selection methods commonly employed in the industry, such as *in vitro* cell biology and screening, tissue and differential expression studies, *in vitro* and animal based pharmacology and the use of animal models, such as gene knock-outs or animal transgenics. Some companies, however, do use human genetics to varying degrees to assist with target identification, such as approaches where larger populations of patients and controls are studied to define associations where a disease and single nucleotide polymorphisms, or SNPs, in certain genes are linked. While SNP associations allow the identifications of genes that show an association with a disease or may increase risk of disease, such associations differ from our Extreme Genetics discovery platform since they do not discover genes that are determinant or causal of a disease. By studying families with rare diseases where individuals present with severe phenotypes, we seek to isolate the genetic cause of such diseases. We then use this causal information as our primary methodology underlying our target discovery and selection.

The key components of our Extreme Genetics discovery platform include:

- an established global network that has included more than 30 clinical collaborators in multiple countries, and which has provided us with access to rare individuals and families with severe phenotypes dispersed throughout the world;
- clinical geneticists and genetic counselors with a deep understanding of clinical phenotypes. These experts identify the rare genetic disorders with severe phenotypes that we study;
- years of experience and extensive know-how in successfully navigating through regulations in multiple countries in order to obtain the approvals necessary to collect and use detailed clinical information and DNA samples from individuals and families with severe phenotypes;
- internal capabilities in genome sequencing, molecular biology and bioinformatics to enable identification of single-gene defects and validation of these as potential drug targets; and

- expertise in small-molecule drug discovery to design promising product candidates that effectively modulate the identified drug targets. Our drug discovery capabilities include medicinal and synthetic chemistry, assay development and *in vitro* and *in vivo* pharmacology.

Our Extreme Genetics discovery platform has proven to be a valuable asset for our company over the years. It has led to a robust pipeline, including an approved product, two development programs, and three pre-clinical programs. Our platform has also allowed us to attract numerous collaborations with leading pharmaceutical companies, including Teva, Genentech, and Merck, that have in aggregate generated more than $140.0 million in non-equity funding through June 30, 2014 and provide us with research funding and the potential for more than $1.0 billion of research, development, regulatory and sales-based milestone payments, as well as royalties on net product sales.

A significant focus of our Extreme Genetics discovery platform has been human channelopathies, enabling us to developed strong capabilities in small molecule ion channel drug discovery. Our ion channel discovery capability is founded upon our understanding of the genetics of channelopathies combined with our proprietary medicinal chemistry assets and know-how. We have been able to identify new binding sites on ion channels which, in turn, has led to the discovery of highly-selective voltage-gated ion channel inhibitors which may have safety and efficacy advantages over non-selective inhibitors.

While the pharmaceutical industry has shown significant interest in channelopathies, a general inability to target ion channels selectively with a pharmaceutical agent has been a limitation to the development of effective therapeutics. We believe we have developed a core competence in developing highly-selective small-molecule ion channel inhibitors, and we believe we can use this know-how to develop a pipeline of novel ion channel inhibitors for diseases in areas of high unmet medical need.

Programs

Glybera (alipogene tiparvovec): A Gene Therapy for the Orphan Disease LPLD

Glybera is a gene therapy approved in the EU in October 2012 for the treatment of a subset of patients with the orphan lipid disorder LPLD. Specifically, it is intended to treat LPLD in patients with severe or multiple pancreatitis attacks, despite dietary fat restrictions. LPLD is a severe metabolic disease of inadequate lipid metabolism, resulting in pancreatitis and in some cases, death. In collaboration with UBC, we demonstrated that humans with a variant of the LPL gene called LPL^{S447X} resulted in increased LPL enzyme activity leading to reduced triglyceride levels. Under our sublicense and research agreement with uniQure, we collaborated with uniQure and UBC on pre-clinical activities, and thereafter uniQure developed a LPL gene therapy product, Glybera, which contains the LPL^{S447X} variant. We believe that the introduction of the therapeutic LPL^{S447X} gene through administration of Glybera provides a clinical benefit for LPLD patients.

Glybera is the first product whose active ingredient was derived from our platform to receive commercial approval and is the first gene therapy to be approved in the EU or North America. The goal of Glybera therapy is to treat LPLD in order to achieve sustained improvement of clearance of triglyceride-rich lipid particles known as chylomicrons, and to significantly reduce the risk of pancreatitis attacks in patients suffering from multiple recurrent pancreatitis and abdominal pain events. Glybera was developed by our licensee, uniQure. In 2012, Glybera was approved in the EU for the orphan disorder LPLD to treat patients with severe or multiple pancreatitis attacks. In July 2013, uniQure announced that it had entered into a partnership with Chiesi for the commercialization of Glybera in the EU and more than a dozen other countries including Brazil, China, Mexico and Russia. We believe that Chiesi plans to launch Glybera in the fourth quarter of 2014 or the first quarter of 2015 in Europe, and that uniQure is pursuing a U.S. product approval strategy with plans to file a BLA with the FDA in 2017. Glybera has received orphan drug designation for the treatment of LPLD in both the EU and the U.S. We are eligible to receive mid single-digit royalties on net sales of the licensed products, for sales made by uniQure and its affiliates. The royalty rates are reduced to a low single-digit for sales made by uniQure and its affiliates in countries where a licensed technology or a licensed product is not covered by a valid patent claim. With respect to uniQure's sublicense to Chiesi, we are eligible to receive a percentage in the low twenties of all non-royalty compensation relating to the licensed technology or products that uniQure receives from Chiesi (for example upfront payments and milestone payments), a percentage in the low twenties of any royalties that uniQure receives from Chiesi based on sales of technology or products covered by the licensed patents, plus a mid single-digit percentage of certain further royalties that uniQure receives from Chiesi based on sales of our licensed technology or products after the expiration of all licensed patents covering the product.

About LPLD

Familial LPLD is a rare autosomal-recessive disorder of lipoprotein metabolism. LPLD is characterized by severe hypertriglyceridemia caused by the absence of LPL activity, and, as a consequence, certain triglyceride-rich lipoproteins accumulate in the plasma. The population frequency of LPLD in the U.S. has been reported to be approximately one in a million individuals by the National Library of Medicine.

LPLD typically manifests early in childhood, with repeated episodes of abdominal pain and acute pancreatitis that can be life-threatening. There is currently no approved gene therapy for LPLD in the U.S. The current management of LPLD consists of strict adherence to an extremely low-fat diet, but compliance with such a diet is challenging. Lipid-lowering drugs are generally not effective for treating LPLD. We believe effective therapeutic strategies are therefore needed for this condition.

About LPL^{S447X}

Together with our collaborators at UBC and using our Extreme Genetics discovery platform, we demonstrated that the LPL^{S447X} variant resulted in reduced triglyceride levels in humans, as this single-gene defect results in elevated LPL enzyme activity and we further demonstrated that LPL^{S447X} in an adenovirus gene therapy could treat hypertriglyceridemia in animal models of LPLD.

Clinical Development of Glybera

In a scientific publication, a single dose of Glybera was well-tolerated with no material safety concerns and was demonstrated to reduce the incidence of acute pancreatitis and abdominal pain events over the two-year study period.

Commercialization of Glybera

In 2012, Glybera was approved in the EU for the orphan disorder LPLD to treat patients with severe or multiple pancreatitis attacks. In July 2013, uniQure announced that it had entered into a partnership with Chiesi for the commercialization of Glybera in the EU and more than a dozen other countries including Brazil, China, Mexico and Russia. We believe that Chiesi plans to launch Glybera in the fourth quarter of 2014 or the first quarter of 2015 in Europe, and that uniQure is pursuing a U.S. product approval strategy with plans to file a BLA with the FDA in 2017. Glybera has received orphan drug designation for the treatment of LPLD in both the EU and the U.S.

TV-45070: A Small Molecule for the Treatment of Pain

TV-45070 (formerly XEN402) is a small-molecule inhibitor of the sodium channel Nav1.7 and other sodium channels, including those that are expressed in the pain-sensing peripheral nervous system. TV-45070 has potentially broad application in nociceptive pain, mediated by damage or injury to tissues, including the pain sensitivity caused by inflammation, and neuropathic pain mediated by damage, dysfunction, or injury of nerves. TV-45070 is partnered with Teva. Pursuant to the terms of the agreement, Teva is obligated to complete three Phase 2 or later stage clinical trials. Using a topical ointment formulation of TV-45070, Teva has initiated a 300-patient, randomized Phase 2b clinical trial in OA of the knee, and data are expected in the third quarter of 2015. Teva is also developing topical TV-45070 in neuropathic pain indications, and is planning a Phase 2b clinical trial in patients with PHN that is expected to start in the first half of 2015. In addition, we are working with Teva to evaluate the opportunity to develop TV-45070 for the orphan disease EM. TV-45070 has received both fast track and orphan designations from the FDA for the treatment of EM.

We selected Nav1.7 as a drug target for pain after we discovered that the Nav1.7 protein is deficient in the rare human disease, CIP, where humans suffering from CIP are unable to feel pain. We have observed promising evidence of activity for TV-45070 in four Phase 2 proof-of-concept clinical trials, including two trials in the orphan disease EM, one trial in PHN and one trial in dental pain, a form of nociceptive pain.

In December 2012, we entered into a collaborative development and license agreement with Teva through its subsidiary Ivax, pursuant to which we granted Teva an exclusive worldwide license to develop and commercialize TV-45070. Under the terms of the agreement, Teva made an upfront payment to us of $41.0 million. In addition, we are eligible to receive potential milestone payments totaling up to $335.0 million, comprised of a $20.0 million clinical milestone payment, up to $285.0 million in regulatory milestone payments, and a sales-based milestone payment of $30.0 million. If TV-45070 is approved, we are also eligible to receive royalties in the low teens to the low twenties on net sales of the licensed products for the timeframe that such products are covered by the licensed patents and in certain other instances. We also have an option to co-promote products in the U.S. Prior to our entry into the collaborative development and license agreement with Teva, we submitted INDs to the FDA for oral TV-45070 for the indication of dental pain (July 2009) and topical TV-45070 for the indication of acute and chronic pain, including neuropathic and inflammatory pain (July 2010). Teva submitted an IND to the FDA for topical TV-45070 for the symptomatic treatment of OA (November 2013).

Discovery of TV-45070 and Mechanism of Action

Using our Extreme Genetics discovery platform, we discovered Nav1.7 by studying families with the rare disorder CIP. CIP patients are unable to feel pain for painful events including fractures, childbirth, osteomyelitis and OA, severe burns, ulcers, wounds and tooth abscesses. Based on this severe phenotype of absence of pain in humans with CIP, we predicted that the single-gene defect causing CIP could define an important novel human drug target for treating pain. We showed that defects in the CIP gene result in deficiency of the sodium channel Nav1.7.

Nav1.7 is highly expressed in peripheral nerves and transmits pain signals. We believe that inhibition of Nav1.7 may reduce these pain signals. TV-45070 was designed to be a non-selective small-molecule inhibitor of Nav1.7 such that it also can inhibit additional sodium channels, including those that we believe play a role in pain signaling. We believe this mixed sodium channel inhibition may enhance the potential efficacy of TV-45070 in chronic pain. TV-45070 is currently being developed as a topical product as its chemical properties are favorable for topical administration, including high local skin and underlying tissue concentrations in tandem with maintenance of low plasma levels. With these properties, we believe we can target the site of generation of peripherally-based pain without unnecessarily exposing other tissues to significant levels of this compound. This is especially true for the central nervous system where we might expect to observe side-effects when multiple sodium channels are inhibited, such as sleepiness, nausea, and dizziness. We have demonstrated efficacy with this compound in multiple animal models for pain including both nociceptive and neuropathic pain models. Topical TV-45070 in animal models has been shown to exhibit anti-inflammatory properties and may be suited to peripherally-based inflammatory pain such as joint arthritic pain. The broad sodium channel inhibition of TV-45070 is in contrast to our selective inhibitors licensed to Genentech, which are selective for Nav1.7 and are being developed as oral formulations.

TV-45070 Clinical Development

Topical and oral formulations of TV-45070 have been studied in Phase 1 clinical trials in healthy volunteers and in four Phase 2 proof-of-concept clinical trials. A 300-patient, randomized Phase 2b clinical trial in OA is ongoing and future clinical development in neuropathic pain is planned.

TV-45070 Phase 1 Clinical Trials

In a topical Phase 1 study, 20 healthy volunteers were dosed once daily for 21 days with 4% and 8% ointment, placebo, a positive control and a 0.9% saline negative control. Topical TV-45070 was generally well tolerated with no clinically meaningful difference observed between cumulative skin irritation scores for 4% and 8% ointment, placebo and the negative saline control. The positive control as expected did show greater skin irritation; there were no serious adverse events, or SAEs, or deaths in this study. All adverse events were moderate or mild in severity with the majority of adverse events related to local skin reactions from the occlusive tape dressings. The most frequently reported adverse events which were not local skin reactions were headache, dizziness, fatigue and oropharyngeal pain. Importantly the average plasma concentrations of TV-45070 were low and, as would be expected, central nervous system side effects were not observed.

To better understand the systemic side effect profile of TV-45070, the drug was also dosed in Phase 1 single and multiple ascending dose studies using a simple liquid-filled capsule for oral administration. The single-ascending dose, or SAD, study was carried out in 38 healthy volunteers dosed up to 800 mg. The multi-ascending dose, or MAD, study was performed in 32 healthy volunteers who were dosed up to 400 mg twice daily for 5.5 days. The maximal tolerated dose, or MTD, for SAD study was 500 mg and dose-limiting toxicity included dizziness and drowsiness observed for the 800 mg single dose, which we believe indicates inhibition of central nervous system expressed sodium channels. The MTD in the MAD study was not achieved and occasional short-lived adverse events of mild to moderate dizziness and drowsiness were reported by some subjects for the 400 mg twice daily dose.

TV-45070 Phase 2 Proof-of-Concept Clinical Trials

We believe that TV-45070, if successfully developed and approved, may have broad market potential as a pain drug. The types of pain that CIP patients cannot perceive suggest that Nav1.7 may be involved in pain signaling for different types of painful stimuli including both nociceptive, such as inflammatory-based pain, and neuropathic pain. The current standards of care for such prevalent forms of pain often provide poor efficacy and dose increases to provide improved efficacy are often limited by poor tolerability including common side effects, such as nausea, dizziness and sleepiness. Certain anti-inflammatory pain medications, including those used to treat OA, have FDA black box warnings for gastrointestinal bleeding and cardiovascular events, both of which can be fatal. Despite currently available treatments for prevalent pain disorders, we believe that there may be subpopulations of pain patients with unmet medical needs, which topical TV-45070 may be able to address given its novel mechanism and local site of action. Given its novel mechanism, we also expect that topical TV-45070 could be used as either a single agent or in combination with other analgesics that work through different mechanisms.

Based on the potential broad utility of TV-45070, prior to our collaboration with Teva, we had conducted four Phase 2 proof-of-concept trials to explore the potential of TV-45070 as a treatment for both nociceptive and neuropathic pain, as well as providing evidence that TV-45070 can block the pain signaling mediated by Nav1.7.

These trials included an oral Phase 2 clinical trial in third molar tooth extraction; a topical Phase 2 clinical trial in postherpetic neuralgia; and two (one oral and one topical) Phase 2 clinical trials in the orphan indication EM. In contrast to the absence of pain in CIP, where Nav1.7 is deficient, over activity of Nav1.7, including genetic gain of function mutations that increase the Nav1.7 mediated pain signaling, can cause the spontaneous pain of primary EM. Furthermore, EM represents a high treatment hurdle as the majority of EM patients do not experience adequate pain relief from current drugs approved for the treatment of pain. Therefore, a demonstration of clinical benefit could represent a new treatment option for EM patients.

Oral TV-45070 Trial in Nociceptive Inflammatory Pain

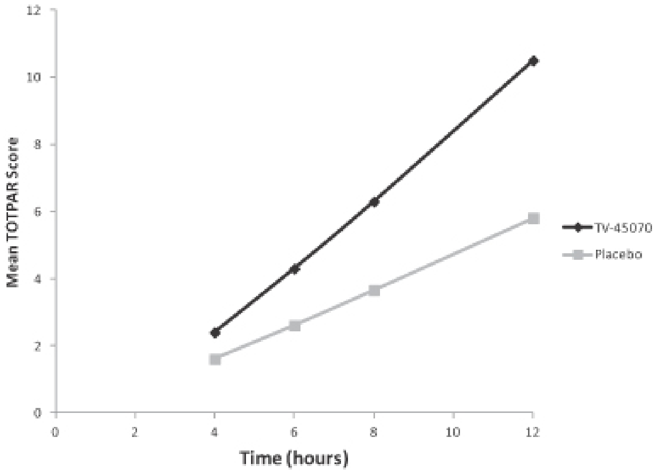
We conducted a trial for third molar tooth extraction, which is an established acute inflammatory pain model. The data from this proof-of-concept trial support future development of TV-45070 for nociceptive pain indications, including OA.

We performed a randomized, double-blind, placebo-controlled, Phase 2 proof-of-concept trial in 61 healthy male subjects, of which, 41 subjects received a single oral 500 mg dose of TV-45070 and 20 subjects received placebo.

DESIGN	KEY SAFETY DATA	KEY EFFICACY DATA
■ Double-blind, randomized, placebo-controlled ■ 61 subjects randomized ■ Single oral dose of 500 mg or placebo	■ Safe and well tolerated ■ The most frequently reported adverse events, or AEs, were nausea, dizziness, headache and drowsiness, which were mild or moderate in intensity ■ No SAEs	■ The primary and secondary endpoints showed consistent trends in favor of reduced pain for TV-45070 versus placebo ■ The primary endpoint of TOTPAR-6 showed a separation between active and placebo but did not reach the pre-defined statistical significance for the trial ■ Certain secondary endpoints achieved statistical significance ■ In a post-hoc analysis, a significantly increased proportion of TV-45070-treated patients reported 30% or greater and 50% or greater reduction in their pain compared to placebo

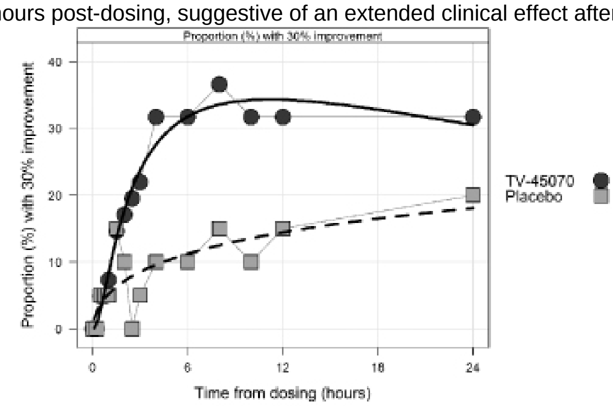
The primary and all secondary endpoints showed consistent trends in favor of reduced pain for TV-45070 versus placebo.

The primary efficacy endpoint was the change in total pain relief at six hours post-dose, or TOTPAR-6. For this endpoint, TV-45070-treated subjects experienced greater pain relief compared to subjects who received placebo (p=0.171), although the difference did not achieve the pre-defined statistical significance for the trial of p=0.1. The figure below illustrates the greater pain relief of TV-45070 versus placebo and a greater separation between TV-45070 and placebo at subsequent observations, including 8, 10, and 12 hours, suggesting improved effect over time.



Multiple secondary endpoints were studied including Categorical Pain Relief Rating Scale, or REL, a numerical five-point scale ranging from no pain to complete pain and Pain Intensity Difference, or PID, compared to baseline. Certain secondary endpoints for the REL achieved predefined statistical significance for this trial.

An exploratory analysis not described within the study protocol submitted to the FDA demonstrated a statistically significant proportion of subjects on TV-45070 exhibited a 30% or greater (p<0.05) (see figure below) and 50% or greater (p<0.05) reduction in pain compared to placebo. These improvements were observed from approximately 1.5 to 19 hours post-dosing, suggestive of an extended clinical effect after a single oral dose.



The data from this proof-of-concept trial support future development of TV-45070 for nociceptive pain indications, including OA.

TV-45070 in Neuropathic EM Pain

TV-45070 has been studied in both a topical formulation and an oral formulation in small, exploratory Phase 2 proof-of-concept clinical trials in primary EM. The table below summarizes the results of these TV-45070 trials:

Oral Phase 2 EM Trial

DESIGN	KEY SAFETY DATA	KEY EFFICACY DATA
n Double-blind, randomized, placebo-controlled crossover n Four primary EM patients randomized n 400 mg or placebo was dosed twice daily for 2 days	n Most common AEs were dizziness and drowsiness that ranged from mild (no interference in daily activities) to severe (significant interference in daily activities) n No SAEs or deaths, with the most frequently reported AEs being dizziness, headache, sedation and drowsiness	n A significant (42%) reduction in EM pain was observed in the three patients where pain was induced (p=0.014)

Topical Phase 2 EM Trial

DESIGN	KEY SAFETY DATA	KEY EFFICACY DATA
n Double-blind, randomized, placebo-controlled n Eight primary EM patients randomized n 8% ointment or placebo was dosed twice daily for two or three weeks	n Safe and well tolerated n Low plasma exposures n No meaningful central nervous system side effects n No drug-related SAEs, or deaths, with local application site reactions being the most common drug-related AE reported	n Three of seven patients (43%) on TV-45070 showed consistent clinically meaningful reductions in induced and daily pain compared to baseline n Four of six (67%) patients on TV-45070 who used rescue cooling showed a reduction in cooling usage compared to baseline n Six of seven (86%) patients on TV-45070 had an improvement in sleep interference scores compared to baseline

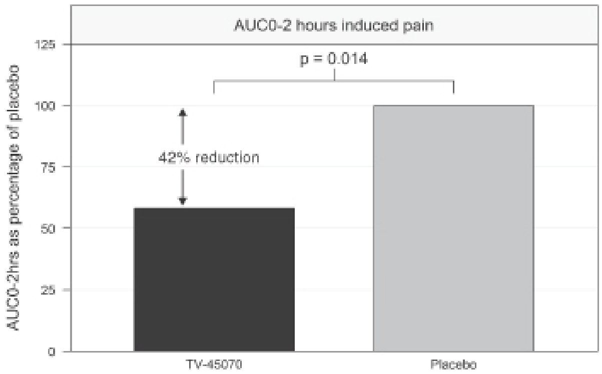
Oral TV-45070 Phase 2 Trial in EM

We conducted a small Phase 2 proof-of-concept trial with oral TV-45070 in patients with primary EM. This exploratory trial, which was published in the journal *Pain*, Goldberg, Y.P. et al *Pain* 153 (2012) 80-85, was a randomized, double-blind, placebo-controlled, two-period crossover design with four subjects comparing oral TV-45070 to placebo each administered twice per day for a duration of two days. In one treatment period, subjects received TV-45070 (400 mg bid), and in the other treatment period, subjects received placebo. The order in which the subjects received each treatment was randomized.

We developed a novel pain induction method for assessing the response of TV-45070 using an electric heater placed at a standardized distance from the subject's feet. Three patients with episodic EM pain were subjected to heat or exercise on up to six occasions during each treatment period to induce a controlled painful flare. One patient who was in constant, severe pain was not induced. Mean total pain intensity scores were measured for the two hours following each pain induction over the two day treatment period with either TV-45070 or placebo. The amount of pain following induction was calculated by quantifying the area under the pain intensity curve for two hours following induction, or AUC0-2hrs.

Improvements in pain efficacy measures in all four subjects were observed, with statistically significant reductions in pain scores in the three subjects in whom pain was induced. The amount of pain in the two hours following induction was reduced by 21% (p = 0.011), 33% (p = 0.004) and 88% (p = 0.031) in these three patients, respectively. Overall, in these three subjects, pain was reduced by 42% on TV-45070, compared to placebo (p = 0.014). The subject who was in constant pain and was not induced, showed a mild reduction in pain at various time points during the TV-45070 dosing period.

In the following figure, these data are presented as a mean AUC0-2hrs for the three subjects as a percentage of placebo who underwent pain induction either by step exercise or by heat. A 42% reduction in the amount of induced pain was observed on average with TV-45070 compared to placebo (p=0.014). These data support our belief in the ability of TV-45070 to inhibit human Nav1.7 mediated pain signaling which supports the predicted mechanism of action.



Topical TV-45070 Phase 2 Trial in EM

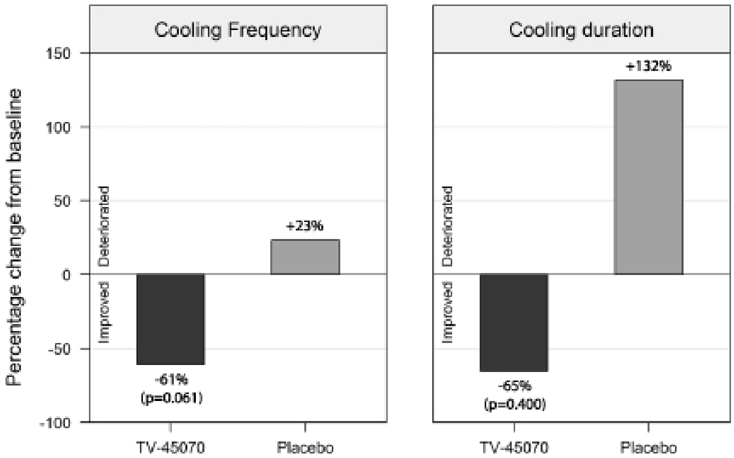
We conducted a small Phase 2 proof-of-concept trial with TV-45070 ointment in patients with primary EM. This exploratory trial was a randomized, double-blind, placebo-controlled design with eight subjects (seven TV-45070 and one placebo) comparing 8% TV-45070 to placebo applied two times per day to the feet for a duration of 14 or 21 days. We evaluated multiple endpoints for each subject to increase our understanding of the effect of TV-45070, including the amount of pain in response to a heat stimulus, the frequency and duration of cooling to provide relief from their painful flares, changes in daily pain scores and the degree of sleep interference. Throughout the trial, TV-45070 plasma concentrations were low and TV-45070 was well-tolerated. Consistent with these low plasma levels, there was no treatment-related dizziness and drowsiness and there were no treatment-related SAEs. Dizziness and drowsiness are common side effects for many currently prescribed centrally-acting analgesics. Local application site reactions were the most common drug-related AEs observed.

In this trial, three of the seven (43%) TV-45070-treated subjects responded positively based on the magnitude and consistency of improvement across the measured efficacy parameters. While the four remaining TV-45070-treated subjects were considered to be non-responders based on their magnitude of response or inconsistent response or both, some improvements were seen in certain efficacy parameters, in particular, sleep and rescue cooling. Similarly, the placebo-treated subject did not show a consistent pattern of response.

Four of the seven (57%) subjects receiving TV-45070 treatment responded to the standard heat inductions compared to pre-treatment. Three of these seven (43%) subjects showed more than 50% improvements in their ability to tolerate and/or recover from the heat inductions. In addition, these three subjects demonstrated clinically meaningful improvements (a one-point, or 30% or greater reduction) in the level of daily pain experienced during the outpatient treatment period compared to pre-treatment. The remaining TV-45070-treated subjects and the placebo-treated subject responded inconsistently or demonstrated deteriorations in their responses compared to baseline.

EM patients may seek relief by immersing their limbs in cold or ice water to help manage their painful flares. If a patient uses less cooling when on TV-45070, this may indicate the product is reducing the number and/or intensity of their EM flares. Four of the six (67%) TV-45070-treated subjects who used cooling at baseline showed a reduction in cooling usage while on treatment. In contrast, the placebo-treated subject cooled for substantially longer during the outpatient period compared to pre-treatment.

Unlike the placebo-treated subject, subjects on TV-45070 used less rescue cooling compared to their baseline measurements. The amount of daily cooling usage, including cooling frequency and cooling duration, for subjects on TV-45070 or placebo as a percentage change from baseline is shown below. This small exploratory trial was not designed to reach statistical significance of p £ 0.05, and no such statistical significance was found.



EM flares often wake patients several times each night and an improvement in the sleep interference scores could indicate that TV-45070 may reduce the number and/or intensity of the flares during sleep. Six of the seven (86%) subjects receiving TV-45070 treatment showed improvements in their daily sleep interference scores during treatment compared to baseline, with three subjects demonstrating at least 50% improvements. In five of the six (83%) subjects this was associated with less or no cooling usage. The placebo-treated subject also demonstrated a reduction in sleep interference; however, as with the daily pain scores, the interpretation of this response is confounded by the greater cooling usage by this subject.

These data support the development of topical TV-45070 as a treatment for the severe pain of EM.

Topical TV-45070 Trial in Postherpetic Neuralgia, or PHN

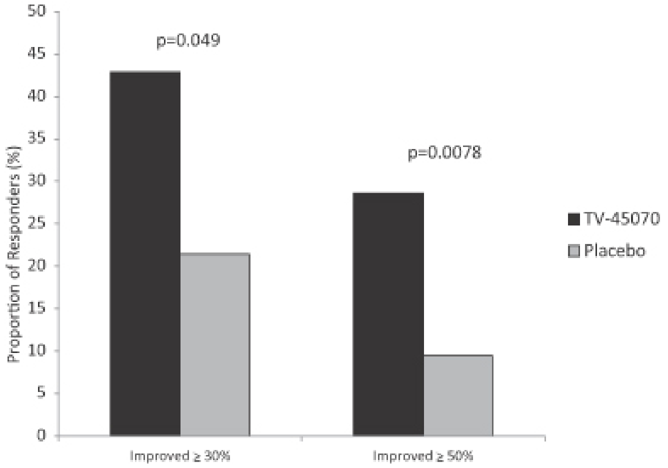
We conducted a Phase 2 proof-of-concept trial of topical TV-45070 in 70 PHN patients. Patients enrolled into the study had refractory PHN and their average disease duration was 76.6 months. This study was a double-blind, placebo-controlled, crossover trial where topical TV-45070 was administered twice daily with each patient receiving either TV-45070 or placebo for three weeks, then after a washout period, the subjects received the alternative treatment.

DESIGN	KEY SAFETY DATA	KEY EFFICACY DATA
• Double-blind, randomized, placebo-controlled, cross-over • 70 subjects randomized • 8% ointment or placebo administered twice daily for three weeks	• Safe and well tolerated • The most frequent AEs (greater than 5% frequency) included local application site reactions, nasopharyngitis and urinary tract infections, or UTIs • Fewer related treatment emergent AEs for TV-45070 (18%) versus placebo (30%) • Low plasma exposure • No meaningful central nervous system side effects • Less application site pain for TV-45070 (16% placebo versus 3% TV-45070) and pruritus, or itch, (13% placebo versus 3% TV-45070) • No drug-related SAEs	• There was a reduction in the primary efficacy endpoint (change from baseline in mean daily pain score) for TV-45070 and placebo, but the difference between treatments was not statistically significant • Significantly increased proportion of TV-45070-treated patients reported 30% or greater (p=0.049) and 50% or greater (p=0.0078) reduction in their pain compared to placebo • A retrospective exploratory analysis not described in the study protocol showed that a significant increased proportion of TV-45070-treated patients reported 30% or greater improvement in sleep (p=0.034) compared to placebo

Topical TV-45070 was well-tolerated with no drug-related SAEs. No drug-related centrally mediated side effects of dizziness and drowsiness were observed in this study. In addition, while on topical TV-45070, PHN patients reported reduced site application pain (3% TV-45070 versus 16% placebo) and less pruritus, or itch, (3% TV-45070 versus 13% placebo) compared to while on placebo treatment. Chronic itch is an important co-morbidity for many PHN patients. The most frequently reported AEs included local application site reactions, nasopharyngitis and UTIs.

There was a reduction in the primary efficacy endpoint (change from baseline in mean daily pain score) for TV-45070 and placebo, but the difference between treatments was not statistically significant. Multiple secondary endpoints were studied, including the proportion of subjects achieving at least 30% and 50% improvements in pain, the use of rescue analgesic medications, and the change in Daily Sleep Interference Scale score. A greater proportion of subjects on TV-45070 experienced a clinically meaningful reduction in their pain during the trial, which is a 30% or greater reduction in pain. A statistically significant larger proportion of subjects on topical TV-45070 exhibited a 30% or greater (p=0.049) and a 50% or greater (p=0.0078) reduction in pain compared to placebo. A greater proportion of subjects on topical TV-45070 exhibited a statistically significant 30% or greater (p=0.034) improvement in sleep compared to placebo. Importantly, a slight trend to reduced use of rescue pain medication in the responders on TV-45070 was observed, suggesting rescue use did not explain the improved efficacy response in these subjects. These data support the development of topical TV-45070 as a treatment for PHN.

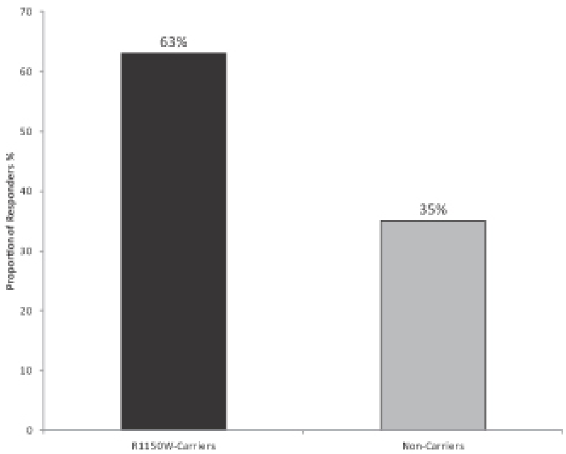
TV-45070 demonstrated a statistically significant increase in the proportion of clinically meaningful responders (30% or greater and 50% or greater reduction in pain) compared to placebo.



There is a relatively common genetic variant of Nav1.7 called the R1150W gene variant. We estimate that this variant has a frequency of 6% to 30% in different ethnic populations. Publications have reported that subjects with this variant who suffer from various painful disorders, including OA, report a greater amount of pain compared to those subjects who do not have this variant. Peripheral nervous system cell-based assays suggest this variant increases the activity of the Nav1.7 channel and the number of resultant nerve signaling action potentials. This increased activity may explain why patients with this variant feel more pain.

We genotyped the PHN trial subjects for R1150W status to explore if the variant could predict a greater likelihood of response to TV-45070 due to its inhibition of NAV1.7. In our PHN trial there were eight carriers of this R1150W variant who were among the evaluable subjects. Of these carriers, five out of eight (63%) had a 30% or greater reduction in their pain when on topical TV-45070. Although it was not a pre-selected endpoint of the trial, a trend towards greater response to TV-45070 was observed in R1150W-carriers versus non-carriers. Due to these observations, stratification of subjects for R1150W in subsequent large Phase 2b trials is planned.

A larger proportion of Nav1.7 R1150W-carriers had a clinically meaningful 30% or greater response to TV-45070 than non-carriers.



Future Development Plans for TV-45070

We are collaborating with Teva on the development of topical TV-45070. Our agreement with Teva requires them to complete three Phase 2 or later stage clinical trials. Using a topical (ointment) formulation of TV-45070, Teva has initiated a 300-patient, randomized Phase 2b clinical trial in OA of the knee, and data are expected in the third quarter of 2015. Teva is also developing topical TV-45070 in neuropathic pain indications, and is currently planning a Phase 2b clinical trial in patients with PHN that is expected to start in the first half of 2015. In addition, we are working with Teva to evaluate the opportunity of developing TV-45070 for the orphan disease EM.

Development of Topical TV-45070 for the Treatment of OA

Based on clinical proof-of-concept data of TV-45070 in the completed clinical trial of third molar tooth extraction, an established pain model of nociceptive pain, Teva has selected to develop topical TV-45070 for the treatment of nociceptive pain in knee OA and recently commenced a randomized Phase 2b study. The rationale supporting the development of TV-45070 in OA includes:

- Clinical proof-of-concept was observed with TV-45070 in the third molar extraction model of nociceptive pain.
- In pre-clinical models, topical TV-45070 has exhibited an ability to penetrate the knee joint and reside locally at relatively high concentrations.
- We have identified a CIP patient with Nav1.7 deficiency and painless late stage OA of the knee.
- Published data for the R1150W variant suggests a role of Nav1.7 in OA pain.
- Application of TV-45070 to the human torso in Phase 1 and Phase 2 clinical trials to date showed low systemic exposure of TV-45070, which may in turn reduce systemic adverse events.
- Central nervous system, or CNS, side effects were not observed in the topical PHN trial due to low plasma levels, which we believe is a benefit given evidence that OA patients have shown poor compliance with products that trigger common CNS side effects.
- Injections of lidocaine, a weak blocker of sodium channels, into human knee joints provides short term relief from OA pain providing pharmacological validation that a sodium channel inhibitor can provide relief from OA pain.

Teva filed an IND application with the FDA in November 2013 and, in the first quarter of 2014, commenced a well-powered Phase 2b single knee OA clinical trial. The trial is being conducted at approximately 35 U.S. sites and is a randomized, double-blind, placebo controlled study. Teva plans to enroll 300 patients who will be randomized to receive either placebo, 4% or 8% topical TV-45070. Patients will apply the treatment twice a day to the affected knee for four weeks.

The primary efficacy endpoint is the change from baseline to the last 5 days of treatment in average evening pain intensity in the treated knee when walking on a flat surface, as measured using the Western Ontario and McMasters Universities Arthritis Index, or WOMAC, scale. Secondary endpoints include the full WOMAC pain subscale, responder rates for 30% and 50% improvement in average evening pain intensity, the percentage of patients who are responders per Outcome Measures in Rheumatoid Arthritis Clinical Trials-Osteoarthritis Research Society International, or OMERACT-OARSI, criteria at week 4, other quality of life assessments and various safety and pharmacokinetic analyses.

Exploratory efficacy analyses will also include stratification of the patients based on their R1150W status to evaluate the response to TV-45070 in the presence of this Nav1.7 variant.

We anticipate top line data from this study to be available in the third quarter of 2015 and, if positive, Teva plans to initiate a Phase 3 clinical trial.

About Osteoarthritis Pain

OA is a degenerative disorder that affects joints, most often the knees, hands, hips, spine and feet. It is characterized by the gradual deterioration of the cartilage in the joint often with joint space narrowing. The major symptom of OA is progressive pain, which may lead to stiffness and loss of mobility, as well as swelling around the joints. It has been estimated that approximately 9% of the U.S. population have pain associated with OA, which translates into approximately 28 million patients.

Arthritic pain, including OA, is generally thought to have an inflammatory component and is often treated with anti-inflammatory pain medicines, which work by inhibiting the effects of inflammatory molecules, such as prostaglandins. Acetaminophen and non-selective non-steroidal anti-inflammatory drugs, or NSAIDs, are generally considered the first-line therapy for OA. Non-selective NSAIDs are often replaced by selective NSAIDs that inhibit cyclooxygenase-2, or COX-2, for those individuals at risk of upper gastrointestinal, or GI, adverse reactions including bleeding, ulcers and perforation. If allowed to progress, these GI adverse events can be fatal and NSAID drugs have a FDA black-box warning for these reactions. Although the COX-2 selective inhibitors have a reduced risk of GI adverse reactions, they also have an increased risk of cardiovascular events that can be fatal. This cardiovascular risk led to some COX-2 products being withdrawn from the market and the addition of a black-box warning for such cardiovascular events. Despite limitations, these anti-inflammatory drugs are widely used in OA patients and provide relief from mild to moderate pain. Patients with severe symptomatic OA who fail to respond to these drugs often have joint replacement surgery and may require narcotics or injections of anesthetic agents into the arthritic joint while waiting for such surgery. We believe that the adverse effects associated with narcotics, especially in the elderly, and the difficulty of injections into the joint, combined with the large number of patients with moderate to severe OA, provide a significant market opportunity for a product with a novel mechanism, such as topical TV-45070. We believe that TV-45070 may avoid many of the efficacy limitations and adverse effects observed with acetaminophen, non-selective NSAIDS, COX-2 inhibitors and narcotics.

Development of Topical TV-45070 for the Treatment of Neuropathic Pain Indications

Teva is also developing topical TV-45070 for neuropathic pain disorders, including PHN. Teva is in the process of finalizing plans for a Phase 2b study, which we expect to begin in the first half of 2015. We believe there is a rationale to support the development of TV-45070 in PHN, including:

- We observed efficacy findings in our PHN Phase 2 proof of concept trial.
- We observed improved responder rates for carriers of the R1150W variant in our PHN Phase 2 proof of concept trial.
- Topical TV-45070 has exhibited an ability to penetrate the skin of PHN patients and reside locally, in both the skin and underlying tissue, at relatively high concentrations.
- Application of TV-45070 to the human torso in Phase 1 and Phase 2 clinical trials to date resulted in low systemic exposure of TV-45070, which may reduce systemic adverse events.
- CNS side effects were not observed in the topical PHN trial due to low plasma levels, which we believe is a benefit given evidence that PHN patients have shown poor compliance with products that trigger common CNS side effects.
- Topical TV-45070 in the PHN Phase 2 proof-of-concept trial reduced the incidence of itch compared to placebo.
- Lidocaine, a weak sodium channel blocker, provides relief of PHN pain and is approved and widely used for this indication.

Teva has an IND with the FDA for the development of TV-45070 as a treatment of neuropathic pain. Teva is currently finalizing its plans for a Phase 2b PHN trial that is expected to commence in the first half of 2015.

About Postherpetic Neuralgia

PHN is a painful complication of *Herpes zoster* infection, occurring particularly in patients above the age of 50. *Herpes zoster*, otherwise known as shingles, generally manifests as a painful skin rash with blisters in a limited area on one side of the body. Pain can occur both before and during the rash, and can also persist after the infection has resolved. PHN is defined as pain that persists for 120 days or longer after the onset of rash. It is estimated that the annual incidence of *Herpes zoster* is between 230 and 630 cases per 100,000 people, with PHN occurring in approximately 20% of cases, resulting in approximately 200,000 PHN patients in the U.S.

Like other forms of neuropathic pain, there is a need for improved treatments for PHN. The current leading drugs used to treat PHN suffer from low efficacy for many patients and common dose limiting side effects. It has been reported that 30% to 50% of PHN patients achieve a 30% to 50% improvement in their pain with these agents. Currently prescribed treatments include Pfizer’s Lyrica, and generic forms of gabapentin, both of which target the same mechanism. Common side effects for these drugs include sleepiness, dizziness, blurred vision, edema and weight gain.

Development of Topical TV-45070 as a treatment for Erythromelalgia

We are collaborating with Teva on the feasibility of developing topical TV-45070 for EM. We believe there is rationale to support the development of TV-45070 in EM, including:

- TV-45070 has demonstrated promising clinical data in Phase 2 proof of concept trials for EM pain.
- EM pain is generally localized to the feet and hands, making application of topical TV-45070 a practical method of administration.
- EM pain appears to have a peripheral component.
- Nav1.7, which is the target for TV-45070, is expressed in peripheral nerve endings in the skin and there is genetic data showing overactivity of this target in patients with EM.

No large clinical trial has been performed for the rare orphan disorder of EM and there are no treatments specifically approved for this disorder. Based on our proof-of-concept data in EM for TV-45070 and given the high unmet need in this patient population, we and Teva held an end of Phase 2 meeting with the FDA and a meeting with the EMA in September 2013 and February 2014, respectively, to discuss the clinical development program. We are currently working with Teva to evaluate the opportunity to develop TV-45070 in EM, which may include us being responsible for future EM clinical development.

About Erythromelalgia

EM is a disorder of severe neuropathic pain where, in certain families, mutations causing increased activity of the Nav1.7 sodium channel have been identified. The disorder is characterized by recurrent flares of intense burning pain with redness of the skin in the feet, hands or both. Although there is a range in age of onset and age of diagnosis, the typical diagnosis for EM is between 50 and 60 years. These painful flares are triggered by a variety of factors including heat exposure, exercise and humidity. Most EM patients experience several painful flares a day and for some, these flares may progress into a state of chronic severe burning pain. Many EM patients seek relief by modulating their environment because they do not respond well to existing pharmacotherapies. For example, patients may seek relief by immersing their limbs in cold or ice water, sometimes for many hours a day. Because of complications related to this method of cooling, some EM patients require amputation of their feet. While the condition is variable in nature, normal daily functioning such as walking, standing, working, socializing, exercising and sleeping is generally significantly impaired. For example, in a study of 32 pediatric EM patients published by the Mayo Clinic, 13% of these EM patients were wheelchair bound due to the severity of their EM symptoms.

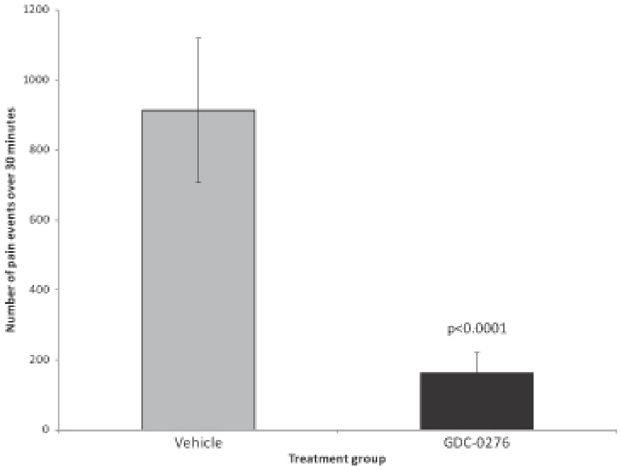
The annual incidence of EM cases has been reported in studies and ranges from 0.36 cases per 100,000 people in Sweden to 1.3 cases per 100,000 people in the U.S. An additional study estimated EM prevalence in Dunedin, New Zealand to be 15 of every 100,000 individuals. With assumed average disease duration of 20 years, these incidence and prevalence data, when extrapolated, would predict approximately 50,000 patients in the U.S. with EM. Of these, we estimate approximately 43,000 may have primary EM, with the remainder having EM that is secondary to another disorder. These estimates of prevalence comprise patients of all ages (from infants to the elderly) and at all stages of disease severity. Furthermore, the prevalence of EM in the U.S. has not to our knowledge been directly determined. In addition, a number of EM patients might not currently be diagnosed or be followed by a specialist physician. Given the above, this prevalence estimate may not represent the number of patients that might be eligible for our clinical trials or that might represent the eligible treatment population for a commercial product.

GDC-0276 and Other Selective Inhibitors of Nav1.7 for the Treatment of Pain

In December 2011, we entered into a collaborative research and license agreement with Genentech and its affiliate, Roche, to discover and develop selective oral inhibitors of Nav1.7 for the treatment of pain. Based on our discovery of Nav1.7 deficiency underlying CIP, we believe that Nav1.7 is a highly-validated target for the treatment of pain. Our Genentech collaboration is focused on discovering and developing selective oral Nav1.7 inhibitors, which is in contrast to our Teva partnership that is focused on developing a topical drug that targets a number of different sodium channels, including Nav1.7.

The first small-molecule, pre-clinical product candidate that was selected for development under our collaboration is GDC-0276. In August 2014, Genentech received approval from Health Canada to initiate a Phase 1 clinical trial for GDC-0276.

To study the effects of targeting Nav1.7 for the treatment of pain, we developed an animal model of inherited EM, or IEM, by expressing human Nav1.7 carrying a known IEM mutation in mice. These mice demonstrate a greater sensitivity to pain. As shown in the figure below, with a single dose of GDC-0276, these mice have fewer pain events demonstrating the ability of GDC-0276 to inhibit Nav1.7 *in vivo*.



Under the terms of the agreement, Genentech paid us an upfront fee of $10.0 million, a $5.0 million milestone payment for the selection of GDC-0276 for development and an $8.0 million milestone payment was earned upon the approval by Health Canada of the CTA for GDC-0276. We are also eligible to receive pre-commercial and commercial milestone payments with respect to the licensed products totaling up to an additional $613.0 million, comprised of up to $45.5 million in pre-clinical and clinical milestone payments, up to $387.5 million in regulatory milestone payments, and up to $180.0 million in sales-based milestone payments for multiple products and indications. In addition, we are eligible to receive royalties based on net sales of the licensed products, which range from a mid single-digit percentage to ten percent for small-molecule inhibitors for the timeframe that such products are covered by the licensed patents and a low single-digit percentage thereafter, plus a low single-digit percentage for large-molecule inhibitors of Nav1.7.

Chronic pain conditions, such as severe cancer pain and neuropathic pain, are generally recognized as unmet medical needs providing potential commercial opportunities for a new oral pain drug. Currently available pain drugs often have either a lack of meaningful pain relief or dose limiting side effects for many patients. An orally administered selective Nav1.7 inhibitor could present a novel mechanism for the treatment of moderate to severe pain as a single agent or in combination with existing analgesics that work through different mechanisms. This mechanism contrasts with our non-selective sodium channel inhibition approach taken with TV-45070. We believe that the selective inhibition of Nav1.7 may lower the potential for dose-limiting central nervous system side-effects and allow for an improved side-effect profile for oral administration of such an inhibitor, which could potentially allow for the treatment of pain that has a central or deep tissue component, including cancer pain and neuropathic pain.

Product Candidates in Discovery

Selective Small-Molecule Sodium Channel Inhibitors for the Treatment of Dravet Syndrome

We are developing selective inhibitors of the voltage-gated sodium channel Nav1.6 as a treatment for the orphan disease DS. We have developed considerable expertise in voltage-gated sodium channel biology and have accumulated significant experience in the development of selective sodium channel inhibitors. We are leveraging this expertise and chemistry know-how for the development of selective inhibitors of Nav1.6. for the treatment of DS.

DS is a severe form of childhood epilepsy that typically causes mental retardation and, in approximately 10% of cases, premature death before the age of 12 years. The frequency of DS in the U.S. has been estimated to be one in 20,000 to 40,000 births, which, when applied to U.S. federal census data, correlates to approximately 7,500 to 15,000 patients with DS in the U.S.

With our collaborators from McGill University, we identified the genetic link between rare human epilepsy and mutations in the Nav1.1 gene. It is now estimated that approximately 80% of DS cases are believed to be due to mutations in one copy of the Nav1.1 voltage-gated sodium channel that cause a partial loss of Nav1.1 function. Nav1.1 plays a critical role in the normal functioning of inhibitory pathways in the brain. The lack of fully functioning Nav1.1 and inhibitory pathways allows the brain excitatory pathways to be unopposed resulting in the severe seizures of DS. The brain excitatory pathways are preferentially mediated by the voltage-gated sodium channel Nav1.6 and therefore if we are able to selectively inhibit Nav1.6 with a small-molecule compound, we expect to taper this neuronal excitation and thereby treat DS. To further support inhibiting Nav1.6 as a potential therapeutic approach to treat DS, published data has shown that seizures and premature death observed in a DS mouse model can be corrected when these animals are bred with a Nav1.6 knockout mouse.

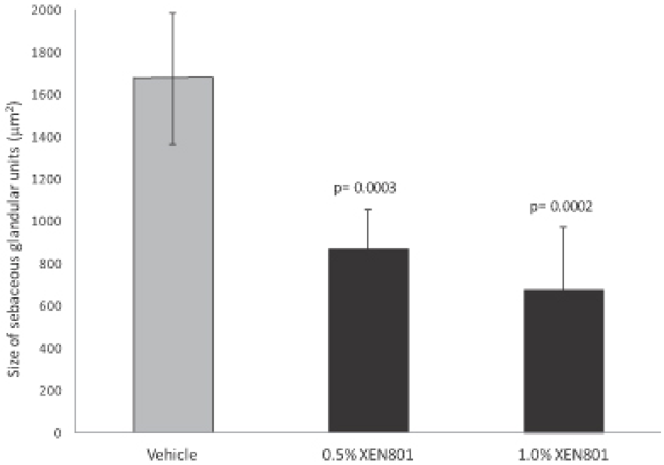
DS is one of the most resistant epilepsies to treatment. Some benefit has been reported for drugs that increase the activity of the inhibitory brain pathways such as benzodiazepines and Stiripentol, while non-selective sodium channel blockers such as lamotrigine are contraindicated as they may worsen seizures due to further inhibition of Nav1.1. Other intractable childhood seizures that have been associated with genetically-linked partial loss of function of Nav1.1 and may benefit from a selective inhibitor of Nav1.6 include intractable childhood epilepsy with generalized tonic-clonic seizures and sporadic infantile epileptic encephalopathy.

Based on our experience and know-how in developing selective ion channel inhibitors, we have identified potent, selective Nav1.6 inhibitors. We expect to have pre-clinical proof-of-concept data in the second half of 2014 in animal models of DS. We anticipate filing an IND for a drug candidate to treat DS in 2016. Given the orphan nature of this disorder, we believe that DS may represent an attractive opportunity for us to advance independently.

XEN801 for the Treatment of Acne

XEN801 is a selective, small molecule inhibitor of SCD1 being developed for the treatment of moderate to severe acne. SCD1 is an enzyme involved in lipid synthesis that is expressed in sebaceous glands in the skin. Mice deficient in SCD1 have a marked phenotype of sebaceous gland atrophy suggesting that inhibition of SCD1 activity in the skin may provide a novel treatment option for disorders of enlarged or overactive sebaceous glands, including acne. We have discovered and developed novel small-molecule SCD1 inhibitors to which we have sole rights. In multiple animal models, we have shown that our SCD1 inhibitors can reduce the size and number of sebaceous glands. XEN801 has demonstrated good properties for topical administration including formulation in a light gel and adequate skin penetration in multiple animal species.

In pre-clinical mouse models, XEN801 applied topically showed reduction in the size of sebaceous glands in the underlying skin in a time and dose dependent manner.



In these pre-clinical mouse efficacy studies, at the vehicle treated sites, numerous normally sized lipid loaded sebaceous glands are visible whereas only very small sebaceous glands with hardly any visible lipids are present at the XEN801 treated sites. These reductions are visible after two days of twice-daily treatment and reached statistical significance after seven days (data presented in the above figure), reverting to normal levels once the treatment is stopped. Skin areas distant from the XEN801 treated sites exhibit no changes in sebaceous glands which is consistent with the observed low plasma concentrations of XEN801 and the high local concentrations found in the skin at the treated sites.

We believe these properties support the local treatment of acne and other dermatological disorders with topical XEN801 by decreasing the size of the sebaceous glands, while leaving the skin in other areas unaffected and not exposed unnecessarily to high drug concentrations.

We anticipate selecting a development candidate for IND-enabling studies in the second half of 2014 and filing an IND in the first half of 2015 to initiate clinical development. We believe a selective, small-molecule inhibitor of SCD1 has therapeutic potential for skin disorders such as moderate to severe acne seborrhoea and sebaceous hyperplasia.

About Acne

Acne is a multifactorial disease of the pilosebaceous unit, which are skin structures consisting of a hair follicle and its associated sebaceous gland. Increased levels of androgens, such as testosterone, which occurs during puberty cause an enlargement of the sebaceous gland that increases the amount of sebum, a naturally occurring oil, production. Acne develops as a result of blockages in the hair follicles due to the sebaceous glands becoming clogged with excess sebum and dead skin cells. Under these conditions, the bacteria *proprionibacterium acnes* can multiply and cause the noticeable inflammatory lesions. We believe that topically applied SCD1 inhibitors will treat acne at its root cause by reducing the underlying sebaceous gland enlargement and reducing sebum production.

With its association with the onset of puberty, acne prevalence peaks in late adolescence and is estimated to affect 40 to 50 million people in the U.S, of which there are approximately 11 million and 1.2 million individuals with moderate and severe acne, respectively.

Milder forms of acne are normally treated with over the counter products such as those containing benzoyl peroxide whereas moderate and severe forms of acne are often treated with the prescription drug isotretinoin. Isotretinoin is effective with the majority of patients reporting an improvement and approximately 50% of patients reporting remission of their acne. The mechanism of action of isotretinoin remains unknown, but scientific studies have shown that it can cause apoptosis, a form of cell death, in sebaceous glands thereby reducing sebum production.

Isotretinoin treatment has been associated with relatively common side effects including thin and dry skin, hair loss, severe acne flares, blood lipid and liver enzyme elevations. However, the most significant adverse event of isotretinoin is birth defects if taken by women during pregnancy or even a short time before conception due to its teratogenic potential. In 2005, the FDA approved a risk management plan for isotretinoin called iPLEDGE. Under this program, general practitioners are prohibited to prescribe isotretinoin and patients are referred to dermatologists registered and activated in the iPLEDGE program. In addition, patients are also required to register and qualify for the iPLEDGE program. Isotretinoin can only be dispensed for a 30-day supply (no refills) by a registered pharmacy.

We believe that a safer alternative drug (without an onerous risk mitigation plan) that potently reduces sebum production may be a significant treatment option for moderate to severe acne.

Selective Small-Molecule Inhibitors of Targets for the Treatment of Cardiovascular Disease

We entered into a collaborative research and option agreement with Merck in June 2009 to discover novel targets and compounds for the treatment of cardiovascular disease using our Extreme Genetics discovery platform. In 2012, Merck exercised its option to obtain an exclusive license to a target for cardiovascular disease and compound inhibitors that were discovered during the research collaboration. The target, when inhibited, is predicted to provide a beneficial lipid profile with the goal of protecting from cardiovascular disease.

New Pipeline Opportunities

Given the commercial opportunity and the pharmaceutical industry's interest in the pain market, we are using our Extreme Genetics discovery platform and specialized insights into the biology of pain to identify new drug targets for this common medical problem. We formed a second collaboration with Genentech in March 2014 for pain genetics, where we intend to focus on rare phenotypes where individuals have an inability to perceive pain or where individuals have non-precipitated spontaneous severe pain. We believe these phenotypes may unlock new key molecular regulators of pain signaling in humans, which we will seek to validate as targets for new pain drugs. For example, we are analyzing CIP families that are not explained by Nav1.7 deficiency as well as families with severe pain phenotypes such as PEPD and inherited EM.

In addition to our study of rare human disorders of extreme pain or the absence of pain, we are also studying other rare disorders with extreme phenotypes that we believe could yield new drug targets in disorders where high medical need exists, such as neurological disorders like essential tremor and cluster headache. Given our expertise in ion channel drug discovery, we are also focusing our discovery efforts on the identification of ion channel targets where we believe novel selective inhibitors might represent significant therapeutic advances with a focus on orphan indications.

Strategic Alliances

Agreement with uniQure for Glybera

Effective August 2000, we entered into a sublicense and research agreement with uniQure (formerly Amsterdam Molecular Therapeutics); pursuant to which we granted to uniQure an exclusive, worldwide sublicense under certain intellectual property controlled by us to develop and commercialize technology and compounds related to the variant of LPL, called LPL^{S447X}. Together with collaborators from UBC, we demonstrated that the LPL^{S447X} variant resulted in increased LPL enzyme activity leading to reduced triglyceride levels in humans. Under our sublicense and research agreement with uniQure, we collaborated with uniQure and UBC on pre-clinical activities, and thereafter uniQure developed an LPL gene therapy product, Glybera, which contains the LPL^{S447X} variant. Glybera was approved in the EU in October 2012 to treat LPLD in patients with severe or multiple pancreatic attacks despite dietary fat restrictions. uniQure conducted the clinical trials and is responsible for the commercialization of Glybera.

Under the terms of the agreement, we are eligible to receive mid single-digit royalties on net sales of the licensed products, for sales made by uniQure and its affiliates. The royalty rates for sales made by uniQure and its affiliates are reduced to a low single-digit in countries where the licensed technology and products are not covered by a valid patent claim. Such royalties are payable until the expiration of the last licensed patent from UBC. In July 2013, uniQure announced that it had entered into a partnership with Chiesi for the commercialization of Glybera in the EU and more than a dozen other countries including Brazil, China, Mexico and Russia. We believe that Chiesi plans to launch Glybera in the fourth quarter of 2014 or the first quarter of 2015 in the EU and that uniQure is pursuing a U.S. product approval strategy with plans to file a BLA with the FDA in 2017. With respect to uniQure's sublicense to Chiesi for the commercialization of Glybera in the EU and more than a dozen other countries including Brazil, China, Mexico and Russia, we are eligible to receive a percentage in the low twenties of all non-royalty compensation relating to the licensed technology or products that uniQure receives from Chiesi (including, for example, upfront payments and milestone payments), a percentage in the low twenties of any royalties that uniQure receives from Chiesi based on sales of technology or products covered by the licensed patents, plus a mid single-digit percentage of certain further royalties that uniQure receives from Chiesi based on sales of our licensed technology or products after the expiration of all licensed patents covering the licensed technology or products during the period expiring ten years after the date of the first sale by or on behalf of Chiesi. If uniQure grants a sublicense to a third party other than to Chiesi, then we are eligible to receive a percentage in the low twenties of all non-royalty compensation relating to the licensed technology or products that uniQure receives from such sublicensee (for example upfront payments and milestone payments), plus a percentage in the low twenties of any royalties that uniQure receives from such sublicensee based on sales of technology or products covered by the licensed patents.

We are eligible to receive certain additional milestone payments of less than CAD$1.0 million for Glybera and for each subsequent product, if any, developed pursuant to the agreement with uniQure. We, in turn, have certain payment obligations to our licensor, UBC, based on amounts received from uniQure or otherwise based on the exploitation of the licensed intellectual property.

Our sublicense agreement with uniQure expires on the date of the expiration of the UBC license agreement. Either party may terminate the agreement in the event of the other party's default under the agreement that remains uncured for 20 days after receipt of notice from the non-breaching party.

Agreement with UBC

Effective August 2000, we entered into a license agreement with UBC pursuant to which UBC granted to us an exclusive, worldwide license under UBC's interest in certain intellectual property controlled by UBC to develop and commercialize technology and compounds in the field of gene therapy, including products that related to the variant of LPL, called LPL^{S447X}.

Under the terms of the agreement, UBC is eligible to receive certain pre-commercial milestone payments. UBC is also eligible to receive a mid single-digit percentage of certain compensation that we receive based on sublicenses granted by us to a third party relating to the licensed technology or products, including in connection with our sublicensing agreement with uniQure for LPL^{S447X}.

Through June 30, 2014, we have paid to UBC upfront fees and milestone payments totaling CAD$230,000 and are obligated to pay a certain additional milestone payment of approximately CAD$200,000 for Glybera and further milestone payments of CAD$322,500 for each subsequent product, if any, developed pursuant to our sublicensing agreement with uniQure.

Our license agreement with UBC expires on the date of the expiration of the last patent granted under such license. In the event that our sublicense with uniQure is terminated, we may terminate the agreement with 30 days advance notice to UBC. Either party may terminate the agreement in the event of the other party's default under the agreement that remains uncured for 30 days after receipt of notice from the non-breaching party, and UBC may terminate without such cure period in the event of certain types of breach by us.

Agreement with Teva for TV-45070

In December 2012, we entered into a collaborative development and license agreement with Teva, through its subsidiary, Ivax, pursuant to which we granted Teva an exclusive worldwide license to develop and commercialize certain products, including TV-45070.

Under the terms of the agreement, Teva paid us an upfront fee of $41.0 million. We are collaborating with Teva to further develop TV-45070, and Teva is funding all development costs with respect to the licensed products. Teva is providing funding to us for certain of our full-time equivalents, or FTEs, performing the research collaboration plan. In addition, we are eligible to receive potential milestone payments totaling up to $335.0 million, comprised of a $20.0 million clinical milestone payment, up to $285.0 million in regulatory milestone payments, and a $30.0 million sales-based milestone payment. If TV-45070 is approved, we are also eligible to receive royalties in the low teens to the low twenties on net sales of the licensed products for the timeframe ending upon the latest of (a) expiration of the last valid claim of a licensed patent covering the product, (b) the date on which such product loses market exclusivity and (c) the 10th anniversary of first commercial sale, in each case on a country-by-country basis.

We have an option to a 20% to 30% co-promotion interest for products incorporating TV-45070 in the U.S. Our exercise of this option is subject to meeting objective financial conditions, staffing requirements and compliance standards to be determined in Teva's reasonable discretion in accordance with standard industry practice. Our co-promotion option is exercisable upon the filing of the first new drug application, or NDA, for a TV-45070 product with the FDA and we will be obligated to pay an opt-in fee to Teva, which is calculated by multiplying our co-promotion interest (as a percentage) by the amount of certain milestones paid or payable by Teva, to which is added certain past and future development costs incurred by Teva with respect to the product for the U.S. Our co-promotion interest is in the 20% to 30% range, and equals our percentage share of detailing activities and co-promotion expenses. Such opt-in fee is payable as a reduction to the milestone payments or our share of operating profits that Teva would otherwise owe to us or a combination of the two. If we exercise this option, upon paying an opt-in fee to Teva, we will be eligible to receive, in lieu of royalties with respect to such product sales in the U.S., a percentage share (equal to our co-promotion interest) of operating profits from such product sales in the U.S.

Our agreement with Teva expires on the date of the expiration of all payment obligations to us under the agreement. Teva may terminate the agreement with 60 days advanced written notice to us after at least three Phase 2 (or later stage) clinical trials have been completed or in the event that safety or efficacy issues arise in the development of the licensed products. Either party may terminate the agreement in the event of the other party's material breach which remains uncured for 90 business days. In certain termination circumstances, we would receive licenses to Teva intellectual property relating to TV-45070 clinical development and regulatory filings. If patents within such Teva intellectual property cover the TV-45070 product, then Teva is eligible to receive royalties from us based on a percentage of net product sales, within the mid single-digit range.

Pursuant to the terms of our agreement, we have the right to require Teva, upon written notice, to purchase common shares issued in this offering if they have commenced a Phase 2b clinical trial of any licensed product under the agreement and if certain minimum price per common share and gross proceed thresholds are met in connection with this offering. The number of common shares Teva would be required to purchase in the offering upon receipt of such notice would equal the lesser of:

- $20.0 million divided by the initial public offering price of our common shares in this offering, if this offering occurs on or after the date Teva commences a Phase 3 trial of any licensed product;
- $10.0 million divided by the initial public offering price of our common shares in this offering, if this offering occurs prior to the date Teva commences a Phase 3 trial of any licensed product;
- 19% of our issued and outstanding shares after giving effect to the common shares issued in this offering; and
- a number of common shares that we specify in a notice to Teva.

We have not yet delivered the notice to Teva regarding the purchase of our common shares.

Agreements with Genentech for GDC-0276 and Selective Inhibitors of Nav1.7 and Pain Genetics

In December 2011, we entered into a collaborative research and license agreement with Genentech and its affiliate, Roche, to discover and develop small and large molecules that selectively inhibit the Nav1.7 sodium channel and companion diagnostics for the potential treatment of pain. Pursuant to this agreement, we granted Genentech a worldwide exclusive license to develop and commercialize compounds directed to Nav1.7 and products incorporating such compounds for all uses. We also granted Genentech a worldwide non-exclusive license to diagnostic products for the purpose of developing or commercializing such compounds.

Under the terms of the agreement, Genentech paid us an upfront fee of $10.0 million, a $5.0 million milestone payment for the selection of GDC-0276 for development and an $8.0 million milestone payment was earned upon the approval by Health Canada of the CTA for GDC-0276. Genentech is providing funding to us for certain of our full-time equivalents, or FTEs, performing the research collaboration plan. In addition, we are eligible to receive pre-commercial and commercial milestone payments with respect to the licensed products totaling up to an additional $613.0 million, comprised of up to $45.5 million in pre-clinical and clinical milestone payments, up to $387.5 million in regulatory milestone payments, and up to $180.0 million in sales-based milestone payments for multiple products and indications. In addition, we are eligible to receive royalties based on net sales of the licensed products, which range from a mid single-digit percentage to ten percent for small-molecule inhibitors for the timeframe that such products are covered by the licensed patents and a low single-digit percentage thereafter until the date that is ten years after first commercial sale on a country-by-country basis, plus a low single-digit percentage for large molecule inhibitors of Nav1.7 for a period of ten years from first commercial sale on a country-by-country basis.

Our agreement with Genentech expires on the date of the expiration of all payment obligations to us under the agreement. Genentech may terminate the agreement with three months advance notice anytime on or after the third anniversary of the effective date of the agreement, and each party may terminate the agreement in the event of a material breach by the other party that remains uncured after 90 days. In the event that Genentech terminates the agreement due to our breach, Genentech retains its licenses and its payment obligations to us are reduced. In the event that we terminate the agreement due to Genentech's breach, the rights and licenses granted to Genentech revert back to us, subject to certain rights to make and use certain large-molecule product candidates that are retained by Genentech, and Genentech is obligated to assign certain regulatory approvals and grant certain licenses to us to enable us to develop and commercialize certain terminated products outside of the collaboration.

In March 2014, we entered into an additional agreement with Genentech for pain genetics, where we intend to use our Extreme Genetics discovery platform to focus on identifying genetic targets associated with rare phenotypes where individuals have an inability to perceive pain or where individuals have non-precipitated spontaneous severe pain. Pursuant to the terms of this agreement, any intellectual property arising out of the collaboration will be jointly owned by us and Genentech. We have also granted Genentech a time-limited, exclusive right of first negotiation on a target-by-target basis to form joint drug discovery collaborations. Under the terms of this agreement, Genentech paid us an upfront payment of $1.5 million. We are eligible for an additional $2.0 million in milestone payments, and, at our option, a Genentech affiliate will invest up to $5.0 million in a private placement concurrent with this public offering at the same price per share as this public offering. The option to invest will expire if the public offering does not occur by December 31, 2014.

Agreement with Merck for Cardiovascular Disease

In June 2009, we entered into an exclusive collaborative research and option agreement with Merck, pursuant to which the parties conducted a research program to discover and develop novel small-molecule candidates for the potential treatment of cardiovascular disease. Merck provided payments to us for our FTEs who performed our activities pursuant to the research program conducted under the Merck agreement. The Merck collaborative research program ended in December 2012.

Under the terms of the agreement, Merck had the option to obtain an exclusive license under certain intellectual property controlled by us to develop and commercialize compounds and products directed to targets in the research program, which has now expired. In June 2012, Merck exercised its option and paid us $2.0 million to obtain such a worldwide exclusive license to develop and commercialize compound inhibitors of a target that was identified using our Extreme Genetics discovery platform. Through June 30, 2014, we have received milestone payments and an option fee totaling $9.0 million, and we are eligible for further research, development and regulatory milestone payments of up to $64.0 million, comprised of $21.0 million in pre-clinical and clinical milestone payments and up to $43.0 million in regulatory milestone payments for products directed to the licensed target, as well as royalties from the mid to high single-digit range in countries where such products are covered by a valid composition or method of use claim of a Xenon or Merck patent or, if not covered by such claims, royalties in the mid single-digit range for ten years after first commercial sale of such products.

We have an option to co-fund the Phase 1 and first Phase 2 clinical trials of product candidates licensed by Merck by paying Merck 50% of such development costs. Such co-funding option is available at the IND-filing stage for the applicable product candidate. If we exercise our co-funding option then the maximum eligible milestone amounts due to us increase to $86.5 million and the royalties increase to the high single-digit to the sub-teen double-digit range.

Our agreement with Merck expires on the date of the expiration of all royalty payment obligations to us under the agreement. Merck has the right to terminate the agreement upon providing certain notices to us. Each party may terminate the agreement in the event of a material breach by the other party that remains uncured for 90 days after notice of such breach. In the event that Merck terminates the agreement due to our breach, the licenses granted to Merck survive and becomes fully paid up. In the event that we terminate the agreement due to Merck’s breach, the licenses granted to Merck terminate.

Intellectual Property

As part of our business strategy, we generally file patent applications disclosing and claiming the drug targets and their novel uses that we identified with the use of our Extreme Genetics discovery platform, novel compositions that modulate such targets, methods of making and using such compositions and various therapeutic formulations of such compositions that cover our product candidates. In some cases, we also file claims on screening assays as well as compositions and methods for use in diagnosing certain diseases. We generally file applications in the U.S., Canada, the EU and other commercially significant foreign jurisdictions. We also rely on trade secrets, internal know-how, technological innovations and agreements with third parties to develop, maintain and protect our competitive position. Our ability to be competitive will depend on the success of this strategy.

As of June 30, 2014, we owned, co-owned or licensed 49 issued or allowed U.S. patents and approximately 20 pending U.S. patent applications, including provisional and non-provisional filings. We also owned, co-owned or licensed an additional 513 pending and granted counterpart applications worldwide, including 117 country-specific validations of 11 European patents.

We have in-licensed from UBC patent applications and patents related to Glybera, and methods of making and using Glybera. These include European Patent No. 1,200,117, Japanese Patent No. 5,095,894, Canadian Patent No. 2,370,081 and pending U.S. Patent Application No. 13/850,203. European Patent No. 1,200,117, Japanese Patent No. 5,095,894 and Canadian Patent No. 2,370,081, are expected to expire in June 2020 (absent any extensions of term); U.S. Patent Application No. 13/850,203, if issued, is expected to expire in 2020 (absent any extensions of term). In addition, U.S. Patent No. 6,814,962, related European Patent No. 763,116, and pending counterpart U.S. Patent Application No. 13/584,203 have composition claims directed to various recombinant viruses containing LPL coding sequences and methods of using such viruses to treat various pathologies, and various other related patents and applications claiming priority to PCT/FR1995/00669 are directed to the preparation of recombinant viruses and uses in gene therapy, all of which are expected to expire between 2014 and 2015 (absent any extensions of term).

As of June 30, 2014, we owned four issued U.S. patents and five pending U.S. patent applications related to TV-45070, and methods of making and using this and certain related compounds. The issued patents are expected to expire between 2026 and 2030 (absent any extensions of term). In addition, we have 28 foreign issued patents (exclusive of European patent national validation) and filed 118 corresponding applications in various foreign jurisdictions relating to TV-45070.

As of June 30, 2014, we co-owned two pending U.S. patent applications, one pending PCT international patent application and three corresponding patent applications in various foreign jurisdictions relating to GDC-0276 and methods of making and using this and certain related compounds. Any patents issuing from these applications are expected to expire in 2033 (absent any extensions of term).

We may obtain patents on our novel compositions before we obtain marketing approval for product candidates containing such compositions. Because patents are only valid for a limited period, and the life of a particular patent may begin prior to the commercial sale of the related product, the commercial value of any patent is limited. However, in certain circumstances, we may be able to seek patent term extensions for patents in the U.S. and in a number of European countries, compensating in part for delays in obtaining marketing approval, but we cannot be certain we will obtain such extensions.

Further, the existence of issued patents does not guarantee our right to practice the patented technology or commercialize any product candidate covered by such a patent. Third parties may have or obtain rights to other patents that could be used to prevent or attempt to prevent us from commercializing our product candidates. If these other parties are successful in obtaining valid and enforceable patents, and establishing our infringement of those patents, we could be prevented from commercializing our product candidates unless we were able to obtain a license under such patents, which may not be available on commercially reasonable terms or at all.

In the conduct of our business, we may infringe patents or other proprietary rights of third parties. If we do infringe such patents or other proprietary rights, we could be prevented from developing or selling products or from using the processes covered by those patents, could be required to pay substantial damages or could be required to obtain a license from the third party to allow us to use their technology, which may not be available on commercially reasonable terms or at all. If we are not able to obtain a required license or develop alternative technologies, we may be unable to develop or commercialize some or all of our products, and our business could be adversely affected.

Much of our scientific capabilities depend upon the knowledge, experience and skills of key scientific and technical personnel. To protect our rights to our proprietary know-how and technology, we require all our employees, consultants and advisors to enter into confidentiality agreements that require disclosure and assignment to us of ideas, developments, discoveries and inventions made by these employees, consultants and advisors in the course of their service to us.

We may be unable to obtain, maintain and protect the intellectual property rights necessary to conduct our business, and we may be subject to claims that we infringe or otherwise violate the intellectual property rights of others, which could materially harm our business. Although we believe our patents and patent applications provide us with a competitive advantage, the patent positions of biotechnology and pharmaceutical companies can be uncertain and involve complex legal and factual questions. We and our collaborators may not be able to develop patentable product candidates or processes or obtain patents from pending patent applications. Even if patent claims are allowed, the claims may not issue, or in the event of issuance, may not be sufficient to protect the technology owned by or licensed to us or to our collaborators. In certain cases where we have licensed rights to our intellectual property to our collaborators, such collaborators have assumed control of the prosecution and maintenance of the intellectual property portfolio related to such licensed rights. If our collaborators fail to adequately prosecute or maintain any portion of our licensed intellectual property, the competitive advantage and value of our intellectual property portfolio may be reduced. For more information, see "Risk Factors—Risks Related to Our Intellectual Property Rights."

We own a number of trademarks and intend to develop names for our product candidates and as appropriate seek to secure trademark protection for them, including domain name registration, in relevant jurisdictions.

Research and Development

We have committed, and expect to continue to commit, significant resources to developing new product candidates. We have assembled experienced research and development teams at our Burnaby, British Columbia location with scientific, clinical and regulatory personnel. As of June 30, 2014, we had 50 employees primarily engaged in research and development. Of these employees, 22 hold a Ph.D. degree or M.D. (or equivalent) degree. From time to time we engage individuals on a contractual basis for limited time periods. Our research and development expenses for the years ended December 31, 2011, 2012 and 2013 and the six months ended June 30, 2013 and 2014 were $12.3 million, $10.5 million, $12.3 million, $7.0 million and $5.1 million, respectively.

Manufacturing

We currently rely, and expect to continue to rely, on third parties and our collaborators for the manufacture of our product candidates for pre-clinical and clinical testing, as well as for commercial manufacture if our product candidates receive marketing approval. Accordingly, we have not internally developed any manufacturing facilities or hired related personnel.

To date, we have obtained materials for our product candidates from multiple third-party manufacturers. We believe that all of the materials required for the manufacture of our product candidates can be obtained from more than one source. However, the manufacturing processes for each of our product candidates, which include large and small-molecules, vary and sourcing adequate supplies may be made more difficult depending on the type of product candidate involved. For example, our small-molecule product candidates generally can be manufactured in reliable and reproducible synthetic processes from readily available starting materials. This chemistry generally is amenable to scale-up and does not require unusual equipment in the manufacturing process.

Competition

The biotechnology and pharmaceutical industries are highly competitive and are characterized by rapidly advancing technologies and a strong emphasis on proprietary products. While we believe that our technology, development experience, scientific knowledge and drug discovery approach provide us with certain advantages, we face potential competition in target discovery and product development from many different approaches and sources, including pharmaceutical and biotechnology companies, academic institutions and governmental agencies and public and private research institutions. Any product candidates or products that we or our collaborators successfully develop and commercialize will compete with existing products and new products that may become available in the future.

With respect to target discovery activities, competitors and other third parties, including academic and clinical researchers, may be able to access rare families and identify targets before we do.

Many of the companies against which we are competing or against which we may compete in the future have significantly greater financial resources and expertise in research and development, manufacturing, pre-clinical testing, conducting clinical trials, obtaining regulatory approvals and marketing approved products than we do. Mergers and acquisitions in the pharmaceutical and biotechnology industries may result in even more resources being concentrated among a smaller number of our competitors. Smaller or early stage companies may also prove to be significant competitors, particularly through collaboration arrangements with large and established companies.

The key competitive factors affecting the success of all of our product candidates, if approved, are likely to be their efficacy, safety, convenience, price, the effectiveness of alternative products, the level of competition and the availability of coverage and adequate reimbursement from government and other third party payors.

Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize products or therapies that are safer, more effective, have fewer or less severe side effects, are more convenient or are less expensive than any products that we may develop. Our competitors also may obtain FDA, European Medicines Agency, or EMA, or other regulatory approval for their products more rapidly than we may obtain approval for ours, which could result in our competitors establishing a strong market position before we are able to enter the market. In addition, our ability to compete may be affected in many cases by insurers or other third party payors seeking to encourage the use of generic products.

Aside from the product marketplace, our competitors also compete with us in recruiting and retaining qualified scientific and management personnel, establishing clinical trial sites, recruiting patients for clinical trials, and by acquiring technologies complementary to, or necessary for, our programs.

Our products and product candidates may compete with various therapies and drugs, both in the marketplace and currently under development.

Glybera (alipogene tiparvovec) Competition

There are no approved gene therapies currently on the market for LPLD. The current management of LPLD consists of strict adherence to an extremely low-fat diet, but compliance with such a diet is challenging. Lipid-lowering drugs are generally not effective for treating LPLD. We are not aware of any other drugs or therapies currently in development that treat LPLD by using the LPL sequence containing the LPL^{S447X} genetic variant or otherwise.

TV-45070 and GDC-0276 Competition

Drug discovery and development for various pain applications is intensely competitive. There are a large number of approved products for neuropathic pain, inflammatory pain and other pain indications. These approved products include capsaicin, celecoxib, lidocaine, narcotic analgesics and pregabalin. We are also aware of clinical-stage development programs at several pharmaceutical and biotechnology companies that are developing Nav1.7 inhibitors for the treatment of pain, including Bioline Rx Ltd., Convergence Pharmaceuticals Limited, Dainippon Sumitomo Co., Ltd. and Pfizer, Inc. Moreover, we are aware of various other product candidates in development that target other mechanisms of action to treat various pain indications, including calcium channel inhibitors, nerve growth factor inhibitors and P2X purinoceptor 3 inhibitors. We are not aware of any drugs or therapies currently approved specifically for treating primary EM.

Government Regulation

We are developing both small-molecule and large-molecule product candidates. Our small-molecule product candidates are regulated as drugs by the FDA. The gene therapy product, Glybera, will be regulated by the FDA as a biologic. Within the FDA, the Center for Drug Evaluation and Research, or CDER, regulates drugs and the Center for Biologics Evaluation and Research, or CBER, regulates biological products. Drugs and biological products are subject to regulation under the Federal Food, Drug, and Cosmetic Act, or FD&C Act, and other federal, provincial, state, local and foreign statutes and regulations. Biological products are also subject to regulation under the Public Health Service Act, or PHS Act. Both the FD&C Act and the PHS Act, as applicable, and their corresponding regulations govern, among other things, the testing, manufacturing, safety, efficacy, labeling, packaging, storage, record keeping, distribution, import, export, reporting, advertising and other promotional practices involving drugs and biological products. FDA approval must be obtained before clinical testing of drugs or biological products is initiated, and each clinical study protocol for such product candidates is reviewed by the FDA prior to initiation in the U.S. FDA approval also must be obtained before marketing of drugs and biological products in the U.S. The process of obtaining regulatory approvals and the subsequent compliance with appropriate federal, provincial, state, local and foreign statutes and regulations require the expenditure of substantial time and financial resources and we may not be able to obtain the required regulatory approvals.

Federal and state agencies, congressional committees and foreign governments have expressed interest in further regulating biotechnology. In particular, ethical, social and legal concerns about genetic testing, genetic research and gene therapy could result in additional regulations restricting or prohibiting the processes we may use in discovering and developing our products candidates and in manufacturing and marketing Glybera and any other gene therapy products we or our collaborators may develop. More restrictive regulations or claims that our products are unsafe or pose a hazard could prevent us from commercializing any products. New government requirements may be established that could delay or prevent regulatory approval of our product candidates under development. It is impossible to predict whether legislative changes will be enacted, regulations, policies or guidance changed, or interpretations by agencies or courts changed, or what the impact of such changes, if any, may be.

U.S. Drug Development Process

The process required by the FDA before a drug or biological product may be marketed in the U.S. generally involves the following:

- completion of nonclinical laboratory tests and animal studies according to good laboratory practices, or GLPs, and applicable requirements for the humane use of laboratory animals or other applicable regulations;
- submission to the FDA of an application for an IND, which must become effective before human clinical studies may begin;
- performance of adequate and well-controlled human clinical studies according to the FDA's regulations commonly referred to as good clinical practices, or GCPs, and any additional requirements for the protection of human research subjects and their health information, to establish the safety and efficacy of the proposed product for its intended use;
- submission to the FDA of an NDA for drug products or a BLA for biological products for marketing approval that includes substantive evidence of safety, purity, and potency from results of nonclinical testing and clinical studies;
- satisfactory completion of an FDA inspection of the manufacturing facility or facilities where the product is produced to assess compliance with good manufacturing practices, or GMP, to assure that the facilities, methods and controls are adequate to preserve the product's identity, strength, quality and purity;
- potential FDA audit of the nonclinical and clinical study sites that generated the data in support of the NDA or BLA; and
- FDA review and approval of the NDA, or licensure of the BLA.

Before testing any drug or biological product candidate in humans, the product candidate enters the pre-clinical testing stage. Pre-clinical tests, also referred to as nonclinical studies, include laboratory evaluations of product chemistry, toxicity and formulation, as well as animal studies to assess the potential safety and activity of the product candidate. The conduct of the pre-clinical tests must comply with federal regulations and requirements including GLPs.

The clinical study sponsor must submit the results of the pre-clinical tests, together with manufacturing information, analytical data, any available clinical data or literature and a proposed clinical protocol, to the FDA as part of the IND. Some pre-clinical testing may continue even after the IND is submitted. The IND automatically becomes effective 30 days after receipt by the FDA, unless the FDA places the clinical study on a clinical hold within that 30-day time period. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical study can begin. The FDA may also impose clinical holds on a product candidate at any time before or during clinical studies due to safety concerns or non-compliance. If the FDA imposes a clinical hold, studies may not recommence without FDA authorization and then only under terms authorized by the FDA. Accordingly, we cannot be sure that submission of an IND will result in the FDA allowing clinical studies to begin, or that, once begun, issues will not arise that suspend or terminate such studies.

Clinical studies involve the administration of the drug or biological product candidate to healthy volunteers or patients under the supervision of qualified investigators, generally physicians not employed by or under the study sponsor's control. Clinical studies are conducted under protocols detailing, among other things, the objectives of the clinical study, dosing procedures, subject selection and exclusion criteria, and the parameters to be used to monitor subject safety, including stopping rules that assure a clinical study will be stopped if certain AEs should occur. Each protocol and any amendments to the protocol must be submitted to the FDA as part of the IND. Clinical studies must be conducted and monitored in accordance with the FDA's regulations comprising the GCP requirements, including the requirement that all research subjects provide informed consent. Further, each clinical study must be reviewed and approved by an independent institutional review board, or IRB, at or servicing each institution at which the clinical study will be conducted. An IRB is charged with protecting the welfare and rights of study participants and considers such items as whether the risks to individuals participating in the clinical studies are minimized and are reasonable in relation to anticipated benefits. The IRB also approves the form and content of the informed consent that must be signed by each clinical study subject or his or her legal representative and must monitor the clinical study until completed.

Human clinical studies are typically conducted in three sequential phases that may overlap or be combined:

- *Phase 1*. The drug or biological product is initially introduced into healthy human subjects and tested for safety. In the case of some products for severe or life-threatening diseases, especially when the product may be too inherently toxic to ethically administer to healthy volunteers, the initial human testing is often conducted in patients.
- *Phase 2*. The drug or biological product is evaluated in a limited patient population to identify possible adverse effects and safety risks, to preliminarily evaluate the efficacy of the product for specific targeted diseases and to determine dosage tolerance, optimal dosage and dosing schedule.
- *Phase 3*. Clinical studies are undertaken to further evaluate dosage, clinical efficacy, potency, and safety in an expanded patient population at geographically dispersed clinical study sites. These clinical studies are intended to establish the overall risk/benefit ratio of the product and provide an adequate basis for product labeling.

Post-approval clinical studies, sometimes referred to as Phase 4 clinical studies, may be conducted after initial marketing approval. These clinical studies are used to gain additional experience from the treatment of patients in the intended therapeutic indication, particularly for long-term safety follow-up. The FDA recommends that sponsors observe subjects in studies of gene therapy products for potential gene therapy-related delayed AEs for a 15-year period, including a minimum of five years of annual examinations followed by 10 years of annual queries, either in person or by questionnaire, of study subjects. During all phases of clinical development, regulatory agencies require extensive monitoring and auditing of all clinical activities, clinical data, and clinical study investigators.

Concurrent with clinical studies, companies usually complete additional animal studies and must also develop additional information about the physical characteristics of the drug or biological product as well as finalize a process for manufacturing the product in commercial quantities in accordance with GMP requirements. To help reduce the risk of the introduction of adventitious agents with use of biological products, the PHS Act emphasizes the importance of manufacturing control for products whose attributes cannot be precisely defined. The manufacturing process must be capable of consistently producing quality batches of the product candidate and, among other things, the sponsor must develop methods for testing the identity, strength, quality, potency and purity of the final drug or biological product. Additionally, appropriate packaging must be selected and tested and stability studies must be conducted to demonstrate that the drug or biological product candidate does not undergo unacceptable deterioration over its shelf life.

Human gene therapy products are a new category of therapeutics, and studies of gene therapy products are subject to certain regulatory requirements in addition to those set forth above including certain requirements of the National Institutes of Health.

U.S. Review and Approval Processes

After the completion of clinical studies of a drug or biological product, FDA approval of an NDA or a BLA must be obtained before commercial marketing of the drug or biological product, respectively. The NDA or BLA must include results of product development, laboratory and animal studies, human studies, information on the manufacture and composition of the product, proposed labeling and other relevant information. In addition, under the Pediatric Research Equity Act, or PREA, an NDA or a BLA or supplement to an NDA or a BLA must contain data to assess the safety and effectiveness of the product for the claimed indications in all relevant pediatric subpopulations and to support dosing and administration for each pediatric subpopulation for which the product is safe and effective. The FDA may grant deferrals for submission of data or full or partial waivers. Unless otherwise required by regulation, PREA does not apply to any drug or biological product for an indication for which orphan designation has been granted. The testing and approval processes require substantial time and effort and there can be no assurance that the FDA will accept the NDA or BLA for filing and, even if filed, that any approval will be granted on a timely basis, if at all.

Under the Prescription Drug User Fee Act, or PDUFA, as amended, each NDA or BLA must be accompanied by a substantial user fee. PDUFA also imposes an annual product fee for drugs and biologics and an annual establishment fee on facilities used to manufacture prescription drugs or biologics. Fee waivers or reductions are available in certain circumstances, including a waiver of the application fee for the first application filed by a small business. Additionally, no user fees are assessed on NDAs or BLAs for products designated as orphan drugs, unless the product also includes a non-orphan indication.

Within 60 days following submission of the application, the FDA reviews an NDA or BLA submitted to determine if it is substantially complete before the agency accepts it for filing. The FDA may refuse to file any marketing application that it deems incomplete or not properly reviewable at the time of submission and may request additional information. In this event, the NDA or BLA must be resubmitted with the additional information. The resubmitted application also is subject to review before the FDA accepts it for filing. Once the submission is accepted for filing, the FDA begins an in-depth substantive review of the NDA or BLA. The FDA reviews the application to determine, among other things, whether the proposed product is safe and potent, or effective, for its intended use, and has an acceptable purity profile, and whether the product is being manufactured in accordance with GMP to assure and preserve the product’s identity, safety, strength, quality, potency and purity. The FDA may refer applications for novel products or products that present difficult questions of safety or efficacy to an advisory committee, typically a panel that includes clinicians and other experts, for review, evaluation and a recommendation as to whether the application should be approved and under what conditions. The FDA is not bound by the recommendations of an advisory committee, but it considers such recommendations carefully when making decisions. During the product approval process, the FDA also will determine whether a Risk Evaluation and Mitigation Strategy, or REMS, is necessary to assure the safe use of the product. If the FDA concludes a REMS is needed, the sponsor of the NDA or BLA must submit a proposed REMS; the FDA will not approve the application without a REMS, if required.

Before approving an NDA or a BLA, the FDA will inspect the facilities at which the product is manufactured. The FDA will not approve the product unless it determines that the manufacturing processes and facilities are in compliance with GMP requirements and adequate to assure consistent production of the product within required specifications. Additionally, before approving an NDA or a BLA, the FDA will typically inspect one or more clinical sites to assure that the clinical studies were conducted in compliance with IND study requirements and GCP requirements. To assure GMP and GCP compliance, an applicant must incur significant expenditure of time, money and effort in the areas of training, record keeping, production, and quality control.

Notwithstanding the submission of relevant data and information, the FDA may ultimately decide that the NDA or BLA does not satisfy its regulatory criteria for approval and deny approval. Data obtained from clinical studies are not always conclusive and the FDA may interpret data differently than we interpret the same data. If the agency decides not to approve the marketing application, the FDA will issue a complete response letter that usually describes all of the specific deficiencies in the application identified by the FDA. The deficiencies identified may be minor, for example, requiring labeling changes, or major, for example, requiring additional clinical studies. Additionally, the complete response letter may include recommended actions that the applicant might take to place the application in a condition for approval. If a complete response letter is issued, the applicant may either resubmit the NDA or BLA, addressing all of the deficiencies identified in the letter, or withdraw the application.

If a product receives regulatory approval, the approval may be significantly limited to specific diseases and dosages or the indications for use may otherwise be limited, which could restrict the commercial value of the product. Further, the FDA may require that certain contraindications, warnings or precautions be included in the product labeling. The FDA may impose restrictions and conditions on product distribution, prescribing, or dispensing in the form of a risk management plan, or otherwise limit the scope of any approval. In addition, the FDA may require post- approval clinical studies, sometimes referred to as Phase 4 clinical studies, designed to further assess a product’s safety and effectiveness, and testing and surveillance programs to monitor the safety of approved products that have been commercialized.

One of the performance goals agreed to by the FDA under the PDUFA is to complete its review of 90% of standard NDAs and BLAs within 10 months from filing and 90% of priority NDAs and BLAs within six months from filing, whereupon a review decision is to be made. The FDA does not always meet its PDUFA goal dates and its review goals are subject to change from time to time. The review process and the PDUFA goal date may be extended by three months if the FDA requests or the application sponsor otherwise provides additional information or clarification regarding information already provided in the submission within the last three months before the PDUFA goal date.

Orphan Drug Designation

Under the Orphan Drug Act, the FDA may grant orphan designation to a drug or biological product intended to treat a rare disease or condition, which is generally a disease or condition that affects fewer than 200,000 individuals in the U.S., or more than 200,000 individuals in the U.S. and for which there is no reasonable expectation that the cost of developing and making a drug or biological product available in the U.S. for this type of disease or condition will be recovered from sales of the product. Both Glybera and TV-45070 have received orphan drug designation from the FDA. Orphan product designation must be requested before submitting an NDA or BLA. After the FDA grants orphan product designation, the identity of the therapeutic agent and its potential orphan use are disclosed publicly by the FDA. Orphan product designation does not convey any advantage in or shorten the duration of the regulatory review and approval process.

If a product that has orphan designation subsequently receives the first FDA approval for such drug for the disease or condition for which it has such designation, the product is entitled to orphan product exclusivity, which means that the FDA may not approve any other applications to market the same drug or biological product for the same indication for seven years, except in limited circumstances, such as a showing of clinical superiority to the product with orphan exclusivity. Competitors, however, may receive approval of different products for the indication for which the orphan product has exclusivity or obtain approval for the same product but for a different indication for which the orphan product has exclusivity. Orphan product exclusivity also could block the approval of one of our products for seven years if a competitor obtains approval of the same product as defined by the FDA or if our product candidate is determined to be contained within the competitor's product for the same indication or disease. If a drug or biological product designated as an orphan product receives marketing approval for an indication broader than what is designated, it may not be entitled to orphan product exclusivity. Orphan drug status in the EU has similar, but not identical, benefits, including up to 10 years of exclusivity.

Post-Approval Requirements

Maintaining substantial compliance with applicable federal, provincial, state, and local statutes and regulations requires the expenditure of substantial time and financial resources. Rigorous and extensive FDA regulation of drug and biological products continues after approval, particularly with respect to GMP. We will rely, and expect to continue to rely, on third parties for the production of clinical and commercial quantities of any products that we may commercialize. Manufacturers of our products are required to comply with applicable requirements in the GMP regulations, including quality control and quality assurance and maintenance of records and documentation. Other post-approval requirements applicable to drug and biological products, include reporting of GMP deviations that may affect the identity, potency, purity and overall safety of a distributed product, record-keeping requirements, reporting of adverse effects, reporting updated safety and efficacy information, and complying with electronic record and signature requirements. After an NDA or BLA is approved, the product also may be subject to official lot release. As part of the manufacturing process, the manufacturer is required to perform certain tests on each lot of the product before it is released for distribution. If the product is subject to official release by the FDA, the manufacturer submits samples of each lot of product to the FDA together with a release protocol showing a summary of the history of manufacture of the lot and the results of all of the manufacturer's tests performed on the lot. The FDA also may perform certain confirmatory tests on lots of some products before releasing the lots for distribution by the manufacturer. In addition, the FDA conducts laboratory research related to the regulatory standards on the safety, purity, potency, and effectiveness of drug and biological products.

We also must comply with the FDA's advertising and promotion requirements, such as those related to direct-to-consumer advertising, the prohibition on promoting products for uses or in patient populations that are not described in the product's approved labeling (known as "off-label use"), industry-sponsored scientific and educational activities, and promotional activities involving the internet. Discovery of previously unknown problems or the failure to comply with the applicable regulatory requirements may result in restrictions on the marketing of a product or withdrawal of the product from the market as well as possible civil or criminal sanctions. Failure to comply with the applicable U.S. requirements at any time during the product development process, approval process or after approval, may subject an applicant or manufacturer to administrative or judicial civil or criminal sanctions and adverse publicity. FDA sanctions could include refusal to approve pending applications, withdrawal of an approval, clinical hold, warning or untitled letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, refusals of government contracts, mandated corrective advertising or communications with doctors, debarment, restitution, disgorgement of profits, or civil or criminal penalties. Any agency or judicial enforcement action could have a material adverse effect on us.

Drug and biological product manufacturers and other entities involved in the manufacture and distribution of approved drug or biological products are required to register their establishments with the FDA and certain state agencies, and are subject to periodic unannounced inspections by the FDA and certain state agencies for compliance with GMPs and other laws. Accordingly, manufacturers must continue to expend time, money, and effort in the area of production and quality control to maintain GMP compliance. Discovery of problems with a product after approval may result in restrictions on a product, manufacturer, or holder of an approved NDA or BLA, including withdrawal of the product from the market. In addition, changes to the manufacturing process or facility generally require prior FDA approval before being implemented and other types of changes to the approved product, such as adding new indications and additional labeling claims, are also subject to further FDA review and approval.

U.S. Patent Term Restoration and Marketing Exclusivity

Depending upon the timing, duration and specifics of the FDA approval of the use of our product candidates, some of our U.S. patents may be eligible for limited patent term extension under the Drug Price Competition and Patent Term Restoration Act of 1984, commonly referred to as the Hatch-Waxman Amendments. The Hatch-Waxman Amendments permit a patent restoration term of up to five years as compensation for patent term lost during product development and the FDA regulatory review process. However, patent term restoration cannot extend the remaining term of a patent beyond a total of 14 years from the product's approval date. The patent term restoration period is generally one-half the time between the effective date of an IND and the submission date of an NDA or BLA plus the time between the submission date of an NDA or BLA and the approval of that application. Only one patent applicable to an approved product is eligible for the extension and the application for the extension must be submitted prior to the expiration of the patent. The U.S. Patent and Trademark Office, in consultation with the FDA, reviews and approves the application for any patent term extension or restoration.

Under the Hatch-Waxman Amendments, a drug product containing a new chemical entity as its active ingredient is entitled to five years of market exclusivity, and a product for which the sponsor is required to generate new clinical data is entitled to three years of market exclusivity. A drug or biological product can also obtain pediatric market exclusivity in the U.S. Pediatric exclusivity, if granted, adds six months to existing exclusivity periods and patent terms. This six-month exclusivity, which runs from the end of other exclusivity protection or patent term, may be granted based on the voluntary completion of a pediatric study in accordance with an FDA-issued "Written Request" for such a study.

The Biologics Price Competition and Innovation Act of 2009 created an abbreviated approval pathway for biological products shown to be similar to, or interchangeable with, an FDA-licensed reference biological product. Biosimilarity, which requires that there be no clinically meaningful differences between the biological product and the reference product in terms of safety, purity, and potency, can be shown through analytical studies, animal studies, and a clinical study or studies. Interchangeability requires that a product is biosimilar to the reference product and the product must demonstrate that it can be expected to produce the same clinical results as the reference product and, for products administered multiple times, the biologic and the reference biologic may be switched after one has been previously administered without increasing safety risks or risks of diminished efficacy relative to exclusive use of the reference biologic. However, complexities associated with the larger, and often more complex, structure of biological products, as well as the process by which such products are manufactured, pose significant hurdles to implementation that are still being worked out by the FDA.

A reference biologic is granted 12 years of exclusivity from the time of first licensure of the reference product. On April 10, 2013, President Obama released his proposed budget for fiscal year 2014 and proposed to cut this 12-year period of exclusivity down to seven years. He also proposed to prohibit additional periods of exclusivity for reference biologics due to minor changes in product formulations, a practice often referred to as "evergreening." The first biologic product submitted under the abbreviated approval pathway that is determined to be interchangeable with the reference product has exclusivity against other biologics submitted under the abbreviated approval pathway for the lesser of (i) one year after the first commercial marketing, (ii) 18 months after approval if there is no legal challenge, (iii) 18 months after the resolution in the applicant's favor of a lawsuit challenging the biologics' patents if an application has been submitted, or (iv) 42 months after the application has been approved if a lawsuit is ongoing within the 42-month period.

Additional Regulation

In addition to the foregoing, provincial, state and federal U.S. and Canadian laws regarding environmental protection and hazardous substances affect our business. These and other laws govern our use, handling and disposal of various biological, chemical and radioactive substances used in, and wastes generated by, our operations. If our operations result in contamination of the environment or expose individuals to hazardous substances, we could be liable for damages and governmental fines. We believe that we are in material compliance with applicable environmental laws and that continued compliance therewith will not have a material adverse effect on our business. We cannot predict, however, how changes in these laws may affect our future operations.

U.S. Foreign Corrupt Practices Act and Canadian Corruption of Foreign Public Officials Act

The U.S. Foreign Corrupt Practices Act and the Canadian Corruption of Foreign Public Officials Act, to which we are subject, prohibit corporations and individuals from engaging in certain activities to obtain or retain business or to influence a person working in an official capacity. It is illegal to pay, offer to pay or authorize the payment of anything of value to any foreign government official, government staff member, political party or political candidate in an attempt to obtain or retain business or to otherwise influence a person working in an official capacity. We can also be held liable for the acts of our third party agents under the Canadian Corruption of Foreign Public Officials Act.

Government Regulation Outside of the U.S.

In addition to regulations in the U.S., we will be subject to a variety of regulations in other jurisdictions governing, among other things, clinical studies and any commercial sales and distribution of our products.

Whether or not we obtain FDA approval for a product, we must obtain the requisite approvals from regulatory authorities in foreign countries prior to the commencement of clinical studies or marketing of the product in those countries. Certain countries outside of the U.S. have a similar process that requires the submission of a clinical study application much like the IND prior to the commencement of human clinical studies. In the EU, for example, a clinical trial application, or CTA, must be submitted to each country’s national health authority and an independent ethics committee, much like the FDA and the IRB, respectively. Once the CTA is approved in accordance with a country’s requirements, clinical study development may proceed.

The requirements and process governing the conduct of clinical studies, product licensing, coverage, pricing and reimbursement vary from country to country. In all cases, the clinical studies are conducted in accordance with GCP and the applicable regulatory requirements and the ethical principles that have their origin in the Declaration of Helsinki.

To obtain regulatory approval of an investigational drug or biological product under EU regulatory systems, we must submit a marketing authorization application, or MAA. The application used to file the NDA or BLA in the U.S. is similar to that required in the EU, with the exception of, among other things, country-specific document requirements. The EU also provides opportunities for market exclusivity. For example, in the EU, upon receiving marketing authorization, new chemical entities generally receive eight years of data exclusivity and an additional two years of market exclusivity. If granted, data exclusivity prevents regulatory authorities in the EU from referencing the innovator’s data to assess a generic application. During the additional two-year period of market exclusivity, a generic marketing authorization can be submitted, and the innovator’s data may be referenced, but no generic product can be marketed until the expiration of the market exclusivity. However, there is no guarantee that a product will be considered by the EU’s regulatory authorities to be a new chemical entity, and products may not qualify for data exclusivity. Products receiving orphan designation in the EU can receive 10 years of market exclusivity, during which time no similar medicinal product for the same indication may be placed on the market. An orphan product can also obtain an additional two years of market exclusivity in the EU for pediatric studies. No extension to any supplementary protection certificate can be granted on the basis of pediatric studies for orphan indications.

The criteria for designating an “orphan medicinal product” in the EU are similar in principle to those in the U.S. Under Article 3 of Regulation (EC) 141/2000, a medicinal product may be designated as orphan if (1) it is intended for the diagnosis, prevention or treatment of a life-threatening or chronically debilitating condition; (2) either (a) such condition affects no more than five in 10,000 persons in the EU when the application is made, or (b) the product, without the benefits derived from orphan status, would not generate sufficient return in the EU to justify investment; and (3) there exists no satisfactory method of diagnosis, prevention or treatment of such condition authorized for marketing in the EU, or if such a method exists, the product will be of significant benefit to those affected by the condition, as defined in Regulation (EC) 847/2000. Orphan medicinal products are eligible for financial incentives such as reduction of fees or fee waivers and are, upon grant of a marketing authorization, entitled to 10 years of market exclusivity for the approved therapeutic indication. The application for orphan drug designation must be submitted before the application for marketing authorization. The applicant will receive a fee reduction for the marketing authorization application if the orphan drug designation has been granted, but not if the designation is still pending at the time the marketing authorization is submitted. Orphan drug designation does not convey any advantage in, or shorten the duration of, the regulatory review and approval process. Glybera has received orphan drug designation for the treatment of LPLD in the EU.

The 10-year market exclusivity may be reduced to six years if, at the end of the fifth year, it is established that the product no longer meets the criteria for orphan designation, for example, if the product is sufficiently profitable not to justify maintenance of market exclusivity. Additionally, marketing authorization may be granted to a similar product for the same indication at any time if:

- The second applicant can establish that its product, although similar, is safer, more effective or otherwise clinically superior;
- The applicant consents to a second orphan medicinal product application; or
- The applicant cannot supply enough orphan medicinal product.

For other countries outside of the EU, such as countries in Eastern Europe, Latin America or Asia, the requirements governing the conduct of clinical studies, product licensing, coverage, pricing and reimbursement vary from country to country. In all cases, again, the clinical studies are conducted in accordance with GCP and the applicable regulatory requirements and the ethical principles that have their origin in the Declaration of Helsinki.

If we fail to comply with applicable foreign regulatory requirements, we may be subject to, among other things, fines, suspension or withdrawal of regulatory approvals, product recalls, seizure of products, operating restrictions and criminal prosecution.

Pharmaceutical Coverage, Pricing and Reimbursement

Significant uncertainty exists as to the coverage and reimbursement status of any product candidates for which we obtain regulatory approval. In the U.S. and markets in other countries, sales of any products for which we receive regulatory approval for commercial sale will depend, in part, on the availability of coverage and adequate reimbursement from third-party payors. Third-party payors include government programs such as Medicare or Medicaid, managed care plans, private health insurers, and other organizations. These third-party payors may deny coverage or reimbursement for a product or therapy in whole or in part if they determine that the product or therapy was not medically appropriate or necessary. Third-party payors may attempt to control costs by limiting coverage to specific drug products on an approved list, or formulary, which might not include all of the FDA-approved drug products for a particular indication, and by limiting the amount of reimbursement for particular procedures or drug treatments.

The cost of pharmaceuticals and devices continues to generate substantial governmental and third party payor interest. We expect that the pharmaceutical industry will experience pricing pressures due to the trend toward managed healthcare, the increasing influence of managed care organizations and additional legislative proposals. Third-party payors are increasingly challenging the price and examining the medical necessity and cost-effectiveness of medical products and services, in addition to their safety and efficacy. We may need to conduct expensive pharmacoeconomic studies in order to demonstrate the medical necessity and cost-effectiveness of our products, in addition to the costs required to obtain the FDA approvals. Our product candidates may not be considered medically necessary or cost-effective. A payor’s decision to provide coverage for a drug product does not imply that an adequate reimbursement rate will be approved. Adequate third-party reimbursement may not be available to enable us to maintain price levels sufficient to realize an appropriate return on our investment in product development.

Some third-party payors also require pre-approval of coverage for new or innovative devices or drug therapies before they will reimburse healthcare providers who use such therapies. While we cannot predict whether any proposed cost-containment measures will be adopted or otherwise implemented in the future, these requirements or any announcement or adoption of such proposals could have a material adverse effect on our ability to obtain adequate prices for our product candidates and to operate profitably.

In international markets, reimbursement and healthcare payment systems vary significantly by country, and many countries have instituted price ceilings on specific products and therapies. There can be no assurance that our products will be considered medically reasonable and necessary for a specific indication, that our products will be considered cost-effective by third-party payors, that coverage or an adequate level of reimbursement will be available or that the third-party payors' reimbursement policies will not adversely affect our ability to sell our products profitably.

Healthcare Reform

In the U.S. and foreign jurisdictions, there have been a number of legislative and regulatory changes to the healthcare system that could affect our future results of operations. In particular, there have been and continue to be a number of initiatives at the U.S. federal and state levels that seek to reduce healthcare costs.

In the U.S., the Medicare Prescription Drug, Improvement, and Modernization Act of 2003, or the Medicare Modernization Act, changed the way Medicare covers and pays for pharmaceutical products. The Medicare Modernization Act expanded Medicare coverage for drug purchases by the elderly by establishing Medicare Part D and introduced a new reimbursement methodology based on average sales prices for physician administered drugs under Medicare Part B. In addition, this legislation provided authority for limiting the number of drugs that will be covered in any therapeutic class under the new Medicare Part D program. Cost reduction initiatives and other provisions of this legislation could decrease the coverage and reimbursement rate that we receive for any of our approved products. While the Medicare Modernization Act applies only to drug benefits for Medicare beneficiaries, private payors often follow Medicare coverage policy and payment limitations in setting their own reimbursement rates. Therefore, any reduction in reimbursement that results from the Medicare Modernization Act may result in a similar reduction in payments from private payors.

In March 2010, the President signed into law the Patient Protection and Affordable Care Act, as amended, or PPACA, a sweeping law intended to broaden access to health insurance, reduce or constrain the growth of healthcare spending, enhance remedies against healthcare fraud and abuse, add new transparency requirements for healthcare and health insurance industries, impose new taxes and fees on pharmaceutical and medical device manufacturers and impose additional health policy reforms. Among other things, PPACA revises the definition of "average manufacturer price" for reporting purposes, which could increase the amount of Medicaid drug rebates to states. Further, the new law imposes a significant annual fee on companies that manufacture or import branded prescription drug products. Substantial new provisions affecting compliance have also been enacted, which may affect our business practices with healthcare practitioners and a significant number of provisions are not yet, or have only recently become, effective. Although it is too early to determine the full effect of PPACA, the new law appears likely to continue the downward pressure on pharmaceutical pricing, especially under the Medicare program, and may also increase our regulatory burdens and operating costs.

In addition, other legislative changes have been proposed and adopted since PPACA was enacted. For example, on August 2, 2011, the President signed into law the Budget Control Act of 2011, which, among other things, created the Joint Select Committee on Deficit Reduction to recommend to Congress proposals in spending reductions. The Joint Select Committee on Deficit Reduction did not achieve a targeted deficit reduction of at least $1.2 trillion for the years 2013 through 2021, triggering the legislation's automatic reduction to several government programs. This includes aggregate reductions to Medicare payments to providers of up to 2% per fiscal year, starting in 2013. On January 2, 2013, President Obama signed into law the American Taxpayer Relief Act of 2012, which, among other things, reduced Medicare payments to several providers and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. These new laws may result in additional reductions in Medicare and other healthcare funding, which could have a material adverse effect on our customers and accordingly, our financial operations.

We expect that PPACA, as well as other healthcare reform measures that have been and may be adopted in the future, may result in more rigorous coverage criteria and in additional downward pressure on the price that we receive for any approved product, and could seriously harm our future revenue. Any reduction in reimbursement from

Medicare or other government programs may result in a similar reduction in payments from private payors. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability, or commercialize our products.

In addition, different pricing and reimbursement schemes exist in other countries. In the European Community, governments influence the price of pharmaceutical products through their pricing and reimbursement rules and control of national healthcare systems that fund a large part of the cost of those products to consumers. Some jurisdictions operate positive and negative list systems under which products may be marketed only once a reimbursement price has been agreed upon. Some of these countries may require, as condition of obtaining reimbursement or pricing approval, the completion of clinical trials that compare the cost-effectiveness of a particular product candidate to currently available therapies. Other member states allow companies to fix their own prices for medicines, but monitor and control company profits. The downward pressure on healthcare costs in general, particularly prescription drugs, has become very intense. As a result, increasingly high barriers are being erected to the entry of new products. In addition, in some countries, cross-border imports from low-priced markets exert a commercial pressure on pricing within a country.

Other Healthcare Laws and Compliance Requirements

In the U.S., the research, manufacturing, distribution, sale and promotion of drug products and medical devices are potentially subject to regulation by various federal, provincial, state and local authorities in addition to the FDA, including the Centers for Medicare & Medicaid Services, other divisions of the U.S. Department of Health and Human Services (e.g., the Office of Inspector General), the U.S. Department of Justice, state Attorneys General, and other state and local government agencies. For example, sales, marketing and scientific/educational grant programs must comply with fraud and abuse laws such as the federal Anti-Kickback Statute, as amended, the federal False Claims Act, as amended, and similar state laws. Pricing and rebate programs must comply with the Medicaid Drug Rebate Program requirements of the Omnibus Budget Reconciliation Act of 1990, as amended, and the Veterans Health Care Act of 1992, as amended. If products are made available to authorized users of the Federal Supply Schedule of the General Services Administration, additional laws and requirements apply. All of these activities are also potentially subject to federal and state consumer protection and unfair competition laws.

The federal Anti-Kickback Statute prohibits any person, including a prescription drug manufacturer (or a party acting on its behalf), from knowingly and willfully soliciting, receiving, offering or providing remuneration, directly or indirectly, to induce or reward either the referral of an individual, or the furnishing, recommending, or arranging for a good or service, for which payment may be made under a federal healthcare program such as the Medicare and Medicaid programs. This statute has been interpreted to apply to arrangements between pharmaceutical manufacturers on one hand and prescribers, purchasers, and formulary managers on the other. The term “remuneration” is not defined in the federal Anti-Kickback Statute and has been broadly interpreted to include anything of value, including for example, gifts, discounts, the furnishing of supplies or equipment, credit arrangements, payments of cash, waivers of payments, ownership interests and providing anything at less than its fair market value. Although there are a number of statutory exemptions and regulatory safe harbors protecting certain business arrangements from prosecution, the exemptions and safe harbors are drawn narrowly, and practices that involve remuneration intended to induce prescribing, purchasing or recommending may be subject to scrutiny if they do not qualify for an exemption or safe harbor. Our practices may not in all cases meet all of the criteria for safe harbor protection from federal Anti-Kickback Statute liability. The reach of the Anti-Kickback Statute was broadened by the recently enacted PPACA, which, among other things, amends the intent requirement of the federal Anti-Kickback Statute such that a person or entity no longer needs to have actual knowledge of this statute or specific intent to violate it in order to have committed a violation. In addition, the PPACA provides that the government may assert that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the federal False Claims Act (discussed below) or the civil monetary penalties statute, which imposes fines against any person who is determined to have presented or caused to be presented claims to a federal healthcare program that the person knows or should know is for an item or service that was not provided as claimed or is false or fraudulent. Additionally, many states have adopted laws similar to the federal Anti-Kickback Statute, and some of these state prohibitions apply to referral of patients for healthcare items or services reimbursed by any third-party payor, not only the Medicare and Medicaid programs in at least some cases, and do not contain safe harbors.

The federal False Claims Act imposes liability on any person or entity that, among other things, knowingly presents, or causes to be presented, a false or fraudulent claim for payment by a federal healthcare program. The *qui tam* provisions of the False Claims Act allow a private individual to bring civil actions on behalf of the federal government alleging that the defendant has submitted a false claim to the federal government, and to share in any monetary recovery. In recent years, the number of suits brought by private individuals has increased dramatically. In addition, various states have enacted false claims laws analogous to the False Claims Act. Many of these state laws apply where a claim is submitted to any third-party payor and not merely a federal healthcare program. There are many potential bases for liability under the False Claims Act. Liability arises, primarily, when an entity knowingly submits, or causes another to submit, a false claim for reimbursement to the federal government. The False Claims Act has been used to assert liability on the basis of inadequate care, kickbacks and other improper referrals, improperly reported government pricing metrics such as Best Price or Average Manufacturer Price, improper use of Medicare numbers when detailing the provider of services, improper promotion of off-label uses (i.e., uses not expressly approved by FDA in a drug's label), and allegations as to misrepresentations with respect to the services rendered. Our future activities relating to the reporting of discount and rebate information and other information affecting federal, provincial, state and third party reimbursement of our products, and the sale and marketing of our products and our service arrangements or data purchases, among other activities, may be subject to scrutiny under these laws. We are unable to predict whether we would be subject to actions under the False Claims Act or a similar state law, or the impact of such actions. However, the cost of defending such claims, as well as any sanctions imposed, could adversely affect our financial performance. Also, the Health Insurance Portability and Accountability Act of 1996, or HIPAA, created several new federal crimes, including healthcare fraud, and false statements relating to healthcare matters. The healthcare fraud statute prohibits knowingly and willfully executing a scheme to defraud any healthcare benefit program, including private third-party payors. The false statements statute prohibits knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false, fictitious or fraudulent statement in connection with the delivery of or payment for healthcare benefits, items or services.

In addition, we may be subject to, or our marketing activities may be limited by, data privacy and security regulation by both the federal government and the states in which we conduct our business. For example, HIPAA and its implementing regulations established uniform federal standards for certain "covered entities" (healthcare providers, health plans and healthcare clearinghouses) governing the conduct of certain electronic healthcare transactions and protecting the security and privacy of protected health information. The American Recovery and Reinvestment Act of 2009, commonly referred to as the economic stimulus package, included expansion of HIPAA's privacy and security standards called the Health Information Technology for Economic and Clinical Health Act, or HITECH, which became effective on February 17, 2010. Among other things, HITECH makes HIPAA's privacy and security standards directly applicable to "business associates"—independent contractors or agents of covered entities that create, receive, maintain, or transmit protected health information in connection with providing a service for or on behalf of a covered entity. HITECH also increased the civil and criminal penalties that may be imposed against covered entities, business associates and possibly other persons, and gave state attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce the federal HIPAA laws and seek attorney's fees and costs associated with pursuing federal civil actions.

There are also an increasing number of state "sunshine" laws that require manufacturers to make reports to states on pricing and marketing information. Several states have enacted legislation requiring pharmaceutical companies to, among other things, establish marketing compliance programs, file periodic reports with the state, make periodic public disclosures on sales, marketing, pricing, clinical trials and other activities, and/or register their sales representatives, as well as to prohibit pharmacies and other healthcare entities from providing certain physician prescribing data to pharmaceutical companies for use in sales and marketing, and to prohibit certain other sales and marketing practices. In addition, beginning in 2013, a similar federal requirement began requiring manufacturers to track and report to the federal government certain payments and other transfers of value made to physicians and other healthcare professionals and teaching hospitals and ownership or investment interests held by physicians and their immediate family members. The federal government will disclose the reported information on a publicly available website beginning in 2014. These laws may affect our sales, marketing, and other promotional activities by imposing administrative and compliance burdens on us. If we fail to track and report as required by these laws or otherwise comply with these laws, we could be subject to the penalty provisions of the pertinent state and federal authorities.

Because of the breadth of these laws and the narrowness of available statutory and regulatory exemptions, it is possible that some of our business activities could be subject to challenge under one or more of such laws. If our operations are found to be in violation of any of the federal and state laws described above or any other governmental regulations that apply to us, we may be subject to penalties, including criminal and significant civil monetary penalties, damages, fines, imprisonment, exclusion from participation in government healthcare programs, injunctions, recall or seizure of products, total or partial suspension of production, denial or withdrawal of pre-marketing product approvals, private *qui tam* actions brought by individual whistleblowers in the name of the government or refusal to allow us to enter into supply contracts, including government contracts, and the curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our results of operations. To the extent that any of our products are sold in a foreign country, we may be subject to similar foreign laws and regulations, which may include, for instance, applicable post-approval requirements, including safety surveillance, anti-fraud and abuse laws, and implementation of corporate compliance programs and reporting of payments or transfers of value to healthcare professionals.

Legal Proceedings

From time to time, we may become involved in legal proceedings or be subject to claims arising in the ordinary course of our business. We are not presently a party to any legal proceedings that, in the opinion of our management, would reasonably be expected to have a material adverse effect on our business, financial condition, operating results or cash flows if determined adversely to us. Regardless of the outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources and other factors.

Facilities

Our headquarters are located in Burnaby, British Columbia, where we occupy approximately 33,600 square feet of office and laboratory space. The term of the lease expires in March 2022. We currently pay an aggregate of approximately $85,415 per month in base rent, property tax, common area maintenance fees and management fees, and the landlord holds a security deposit equal to approximately $84,314. We believe that our existing facilities are adequate to meet our business requirements for the near-term and that additional space will be available on commercially reasonable terms, if required.

Environmental Matters

Our operations require the use of hazardous materials (including biological materials) which subject us to a variety of federal, provincial and local environmental and safety laws and regulations. Some of the regulations under the current regulatory structure provide for strict liability, holding a party potentially liable without regard to fault or negligence. We could be held liable for damages and fines as a result of our, or others', business operations should contamination of the environment or individual exposure to hazardous substances occur. We cannot predict how changes in laws or development of new regulations will affect our business operations or the cost of compliance.

Employees

As of June 30, 2014, we had 69 employees, including 63 full-time employees. Of our employees, 50 were primarily engaged in research and development, and 22 of whom hold a Ph.D. or M.D. (or equivalent) degree. None of our employees is represented by a labor union. We have not experienced any work stoppages, and we consider our relations with our employees to be good.

MANAGEMENT

Executive Officers and Directors

The following table sets forth information regarding our current executive officers and directors, and their ages as of June 30, 2014:

NAME	AGE	POSITION(S)
Executive Officers		
Simon Pimstone, M.B. ChB., Ph.D.	46	President, Chief Executive Officer and Director
Gary Bridger, Ph.D.	51	Executive Vice President of Research and Development
Charles J. Cohen, Ph.D.	66	Vice President, Biology
Karen G. Corraini, J.D.	59	General Counsel and Corporate Secretary
Y. Paul Goldberg, M.B. ChB., Ph.D.	54	Vice President of Clinical Development
Ian Mortimer, MBA, CPA, CMA	38	Chief Financial Officer
Robin Sherrington, Ph.D.	53	Senior Vice President of Business & Corporate Development
Non-Employee Directors		
Michael Tarnow (1)(2)(3).	70	Chair of the Board
Mohammad Azab, MBA, M.B. ChB. (2)(3).	58	Director
Johnston L. Evans (1)	66	Director
Michael Hayden, M.B. ChB., Ph.D.	62	Director
Frank Holler (1)	57	Director
Gary Patou, M.B. B.S., M.D. (2)(3)	55	Director
Evan A. Stein, M.B. ChB., Ph.D.	67	Director

(1) Member of the audit committee.
(2) Member of the compensation committee.
(3) Member of the nominating and corporate governance committee.

Executive Officers

Simon Pimstone, M.B. ChB., Ph.D., FRCPC co-founded our company, has served as our President and Chief Executive Officer since January 2003, and has served on our board of directors since our inception in November 1996. Prior to founding our company, Dr. Pimstone trained as a clinical research fellow with the Department of Medical Genetics at the University of British Columbia from 1994 until 1998, where he was responsible for managing a provincial lipid clinic outreach program providing lipid management to at risk patients in the Province of British Columbia. Dr. Pimstone holds an M.B. ChB. from the University of Cape Town, a FRCPC from the University of British Columbia, and a Ph.D. from the University of Amsterdam in cardiovascular genetics. Dr. Pimstone is a member and former chair of the board of directors of LifeSciences British Columbia, a non-profit industry association that supports the life science community, and is a member of the board of directors of Providence Health Care, a non-profit organization that provides health care services to British Columbia patients and residents. Dr. Pimstone also serves as director of the private biotechnology companies Enject Therapeutics Inc., Eupraxia Pharmaceuticals Inc. and Indel Therapeutics Inc. Our board of directors believes that Dr. Pimstone possesses specific attributes that qualify him to serve as a director, including his extensive executive leadership experience, many years of service on our board of directors and as our Chief Executive Officer and extensive knowledge of our company and industry.

Gary Bridger, Ph.D. has served as our Executive Vice President of Research and Development since January 2013. Dr. Bridger serves as a Managing Director at Five Corners Capital, which has been appointed to manage the remaining portfolio of biotechnology and technology investments of Ventures West Capital Management, a venture capital firm. Dr. Bridger served as a venture partner for Ventures West from June 2010 until June 2012. From January 2008 to May 2010, Dr. Bridger served as a consultant to various biotechnology companies. Prior to Ventures West Capital Management, Dr. Bridger worked at Genzyme Corporation (subsequently acquired by Sanofi, S.A.), a global pharmaceutical company focused on rare diseases and multiple sclerosis, from November 2006 until

December 2007. In this position he assisted with development, regulatory and commercial strategies for Mozobil. Prior to Genzyme, Dr. Bridger co-founded AnorMED Inc., a biopharmaceutical company, in June 1996 and was its Chief Scientific Officer from 2000 until its acquisition by Genzyme in November 2006. At AnorMED, he was responsible for research, development, and clinical programs. Dr. Bridger currently serves on the Scientific Advisory Board of Alectos Therapeutics Inc., a private company that discovers and develops novel small-molecule therapeutics. Dr. Bridger received his Ph.D. in Organic Chemistry from the University of Manchester Institute of Science and Technology (United Kingdom) and completed a post-doctoral fellowship at Boston College.

Charles J. Cohen, Ph.D. has served as our Vice President, Biology since 2008. Prior to joining us, Dr. Cohen worked at Vertex Pharmaceuticals as a Research Fellow II from 2004 to 2008. In this position he led biology teams targeting neuropathic pain and neuroinflammation. From 1986 to 2004, Dr. Cohen worked at Merck Research Laboratories, or MRL. From 2000 to 2004, he served as Director of Neuroscience and was world-wide coordinator of MRL's research on multiple sclerosis and neuroinflammation. From 1986 to 2000, Dr. Cohen was a member of the Ion Channel department, advancing to the level of Senior Investigator. Prior to MRL, Dr. Cohen served as a Senior Scientist at Bayer Pharmaceuticals. Dr. Cohen received his Ph.D. in Biophysics and Theoretical Biology from the University of Chicago and received post-doctoral training in the Department of Cardiology at the University of Chicago and the Department of Physiology at Yale University.

Karen G. Corraini, *J.D.* has served as our General Counsel and Corporate Secretary since February 2003, and has held various positions since joining us in June 2001. Prior to joining us, Ms. Corraini practiced law at McCarthy Tétrault LLP from January 2000 until June 2001. From 1996 to 1999, Ms. Corraini was Managing Director and Chief Executive Officer of the Canadian Bacterial Diseases Network, an organization focused on the discovery and commercialization of microbiology-related research from a Canada-wide consortium of researchers. Prior to that, Ms. Corraini practiced law at the Canadian law firms of Goldsmith and Harshorne and Ferguson Gifford. Ms. Corraini is a member of the board of the Cystic Fibrosis Technology Initiative and of the British Columbia Chapter of the Association of Corporate Counsel. She also serves as a member of the Research Advisory Council for Cystic Fibrosis Canada. She received her Medical Laboratory Technology Degree from SAIT and Foothills Hospital, and a J.D. from the University of Victoria.

Y. Paul Goldberg, M.B. ChB., Ph.D., FRCPC has served as our Vice President of Clinical Development since February 2010, as our Senior Director, Clinical Biology and Target Discovery from 2002 until February 2010, as our Senior Director, Scientific Programs from 2001 until 2002, and as our Director and Senior Scientist from 2000 until 2002. Since 2000 Dr. Goldberg has also worked at the University of British Columbia in the Department of Medical Genetics as a Medical Geneticist, Clinical Assistant Professor. Dr. Goldberg received his M.B. ChB. and Ph.D. from the University of Cape Town, and he obtained his specialization in clinical genetics, FRCPC from the University of British Columbia.

Ian Mortimer, MBA, CPA, CMA has served as our Chief Financial Officer since October 2013. Prior to joining us, Mr. Mortimer served as Executive Vice President and Chief Financial Officer at Tekmira Pharmaceuticals Corporation, or Tekmira, a NASDAQ-listed biotechnology company focused on the development of RNA interference, or RNAi, therapeutic drugs, from 2007 until October 2013. Mr. Mortimer was responsible for all aspects of Tekmira's finance and capital markets activities and led Tekmira's listing on NASDAQ in 2010. From 2004 to 2007, Mr. Mortimer was Chief Financial Officer at Inex Pharmaceuticals and held various other positions at Inex Pharmaceuticals from 1997 to 2004. Mr. Mortimer has an M.B.A. from Queen's University, a B.Sc. in Microbiology from the University of British Columbia and is a Chartered Professional Accountant, Certified Management Accountant.

Robin Sherrington, Ph.D. has served as our Senior Vice President of Business & Corporate Development since February 2012, as our Vice President of Business & Corporate Development from January 2010 to February 2012, and has held various Senior Director positions in business development and other departments since joining us in March 2001. Prior to joining us, Dr. Sherrington worked at Pfizer, Inc., a global pharmaceutical company, as a neuroscientist from 1999 to 2001. Dr. Sherrington also previously served as Director of Neuroscience, from 1996 to 1999, at the biotechnology companies Axys Pharmaceuticals and Sequana Therapeutics. Prior to 1996 Dr. Sherrington was a post-doctoral fellow at University of Toronto, received his Ph.D. from the University College London, and his B.Sc. with honors from University of Reading.

Non-Employee Directors

Michael Tarnow has served as chair of our board of directors since May 1999. Since 1995, Mr. Tarnow has been an advisor to and member of the boards of directors of private and public healthcare and biotechnology companies in the U.S., Canada and Europe, including Axcan Pharma, Creative Biomolecules, Inc, Caprion Pharmaceuticals Inc. and MediGene AG. He served as Chairman of EntreMed, Inc., or EntreMed, from February 2003 to February 2009, and served as Executive Chairman of EntreMed from February 2009 to January 2012. Mr. Tarnow holds a B.B.A. in Business Administration from Wayne State University and a J.D. from the University of Illinois, College of Law. Our board of directors believes that Mr. Tarnow is qualified to serve on our board of directors because of his senior management experience in the biopharmaceutical industry and his knowledge and perspective on our business.

Mohammad Azab, MBA, M.B. ChB. has served as a member of our board of directors since October 2003. Dr. Azab has been the Chief Medical Officer of Astex Pharmaceuticals, Inc., a pharmaceutical company focused on the discovery and development of drugs in oncology and other areas, since July 2009 and has been President and Chief Medical Officer of Astex since January 2014. Prior to joining Astex, he was with Intradigm Corporation, a developer of RNAi therapeutics acquired by Silence Therapeutics PLC, where he served as President and Chief Executive Officer from July 2006 until November 2008 and as a director from July 2006 until January 2010. Prior to Intradigm Corporation, he served as Executive Vice President, of Research and Development and Chief Medical Officer for QLT Inc., and held several senior positions at AstraZeneca and Sanofi. Dr. Azab holds an M.B.A. from the Richard Ivey School of Business, University of Western Ontario, and an M.B. ChB. from Cairo University. He received post-graduate training and degrees in oncology research from the University of Paris-Sud and biostatistics from the University of Pierre et Marie Curie in Paris, France. Our board of directors believes Dr. Azab is qualified to serve on the board of directors because of his extensive senior management experience in our industry.

Johnston L. Evans has served as a member of our board of directors since March 2008. Mr. Evans has been a General Partner at Invesco Private Capital, Inc., a venture capital firm, and its predecessor since 1995. He served as a member of the board of directors of E2open, Inc., a publicly-traded software solutions provider, from June 2005 to November 2013. Mr. Evans holds a B.A. in Political Science from Boston University. Our board of directors believes that Mr. Evans' qualifications to serve on our board of directors include his extensive experience as a venture capital investor and a director of a public company.

Michael Hayden, M.B. ChB., Ph.D., FRCPC co-founded our company and has served as a member of our board of directors since November 1996. Dr. Hayden previously served as our Chief Scientific Officer from January 1997 to September 2012. Since September 2012, Dr. Hayden has been Chief Scientific Officer and President of Global Research & Development of Teva Pharmaceutical Industries Ltd. Dr. Hayden has also been a professor of Medical Genetics at the University of British Columbia since August 1983 and Director of the Center for Molecular Medicine and Therapeutics since 1992. He is presently the Program Director of the Translational Laboratory in Genetic Medicine in Singapore. He received his Ph.D. and M.B. ChB. from the University of Cape Town and completed his post-doctoral fellowship and training at Harvard Medical School. Our board of directors believes Dr. Hayden is qualified to serve on our board of directors because of his scientific background and his extensive knowledge and perspective on our company.

Frank Holler has served as a member of our board of directors since February 1999 and previously served as our President and Chief Executive Officer from February 1999 until June 2003. Since March 2004, Mr. Holler has been the Chief Executive Officer at BC Advantage Funds (VCC) Ltd., a venture capital firm that invests in emerging life science, cleantech and information technology companies, where he has served as Chairman since January 2010. Mr. Holler also served as President and Chief Executive Officer of ID Biomedical Corporation, a publicly-traded biotechnology company, from 1991 to 1998 and was a founding director of Angiotech Pharmaceuticals, a publicly-traded biotechnology company, from 1992 to 1997. Mr. Holler holds a B.A. in Economics and an M.B.A. from the University of British Columbia. Our board of directors believes Mr. Holler is qualified to serve on our board of directors because of his experience as a biotechnology entrepreneur and venture capitalist and his knowledge and perspective on our company.

Gary Patou, M.B. B.S., M.D. has served as a member of our board of directors since January 2004. Dr. Patou has been a managing director of MPM Capital, a venture capital fund, since May 2005. He has served as Chief Medical Officer of Pacira Pharmaceuticals, Inc., a specialty pharmaceutical company, since January 2009. Dr. Patou has previously served in various positions at private pharmaceutical companies, including as Chief Medical Officer for Peplin, Ltd. from June 2006 to April 2007, Chief Medical Officer at Cerimon Pharmaceuticals, Inc., from June 2005 to June 2006, and Chief Medical Officer at Oscient Pharmaceuticals, Inc. from February 2004 to April 2005. Dr. Patou has held a number of academic appointments at University College & Middlesex School of Medicine in London and holds an M.B. B.S. from University College Hospital, London and a B. Sc. in immunology from University College London. Our board of directors believes that Dr. Patou's qualifications to serve on our board of directors include his scientific background and extensive senior management experience in our industry.

Evan A. Stein, M.B. ChB., Ph.D., FRCPC, FCAP has served as a member of our board of directors since June 2011 and from June 2006 to June 2009. Dr. Stein previously served as Chief Scientific Officer and a member of the board of directors of Medpace LLC, a contract research organization servicing the pharmaceutical industry from January 2006 to December 2012. Medpace LLC was acquired by CCMP, a private equity firm, in 2011. Dr. Stein holds an M.B. ChB. and Ph.D. from the University of Witwatersrand Medical School in Johannesburg, South Africa. We believe that Dr. Stein's qualifications to serve on our board of directors include his senior management experience in our industry.

Board Composition and Risk Oversight

Our board of directors is currently composed of eight members. Six of our directors are independent within the meaning of the independent director guidelines of The NASDAQ Global Market, or NASDAQ. Dr. Stein and Mr. Evans were elected to our board of directors pursuant to a nomination process set forth in a shareholders agreement. Contingent upon the closing of this offering, the provisions in the shareholders agreement providing for the nomination process will be eliminated. The articles of continuance and by-laws to be in effect upon the completion of this offering provide that the number of directors shall be at least one up to a maximum of 10 and will be fixed from time to time by resolution of the board of directors. Each of our directors is subject to election at each annual meeting of our shareholders. There are no family relationships among any of the directors or executive officers.

During our 2013 fiscal year, our board of directors met eight times, four of which were in person.

Our board of directors has an active role, as a whole and also at the committee level, in overseeing the management of our risks. Our board of directors is responsible for general oversight of risks and regular review of information regarding our risks, including credit risks, liquidity risks and operational risks. The compensation committee is responsible for overseeing the management of risks relating to our executive compensation plans and arrangements. The audit committee is responsible for overseeing the management of risks relating to accounting matters, financial reporting and potential conflicts of interest. The nominating and corporate governance committee is responsible for overseeing the management of risks associated with the independence of our board of directors. While each committee is responsible for evaluating certain risks and overseeing the management of such risks, the entire board of directors is regularly informed through discussions with committee members about such risks. Our board of directors believes its administration of its risk oversight function has not affected our board of directors' leadership structure.

Director Independence

Upon the completion of this offering, we anticipate that our common shares will be listed on NASDAQ. Under the NASDAQ rules, independent directors must comprise a majority of a listed company's board of directors within a specified period of the completion of this offering. In addition, NASDAQ rules require that, subject to specified exceptions, each member of a listed company's audit, compensation and nominating and governance committees be independent. Audit committee members must also satisfy the independence criteria set forth in Rule 10A-3 under the Securities Exchange Act of 1934, as amended. Under NASDAQ rules, a director will only qualify as an "independent director" if, in the opinion of that company's board of directors, that person does not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director.

To be considered independent for purposes of Rule 10A-3, a member of an audit committee of a listed company may not, other than in his capacity as a member of the audit committee, the board of directors or any other board committee: (1) accept, directly or indirectly, any consulting, advisory, or other compensatory fee from the listed company or any of its subsidiaries; or (2) be an affiliated person of the listed company or any of its subsidiaries.

In October 2013, our board of directors undertook a review of its composition, the composition of its committees and the independence of directors and considered whether any director has a material relationship with us that could compromise his ability to exercise independent judgment in carrying out his responsibilities. Based upon information requested from and provided by each director concerning his background, employment and affiliations, including family relationships, our board of directors has determined that none of Mohammad Azab, Johnston Evans, Frank Holler, Gary Patou, Evan Stein and Michael Tarnow, representing six of our eight directors, has a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director and that each of these directors is "independent" as that term is defined under NASDAQ rules. Our board of directors also determined that Frank Holler (chair), Johnston Evans and Michael Tarnow, who comprise our audit committee, Mohammad Azab (chair), Gary Patou and Michael Tarnow who comprise our compensation committee, and Gary Patou (chair), Mohammad Azab and Michael Tarnow who comprise our nominating and corporate governance committee, satisfy the independence standards for those committees established by applicable SEC rules and NASDAQ rules.

In making this determination, our board of directors considered the relationships that each non-employee director has with us and all other facts and circumstances our board of directors deemed relevant in determining their independence, including the beneficial ownership of our shares by each non-employee director.

Board Committees

Our board of directors has an audit committee, a compensation committee and a nominating and corporate governance committee, each of which has the composition and the responsibilities described below.

Audit Committee

Our audit committee oversees our corporate accounting and financial reporting process. Among other matters, the audit committee:

- approves the hiring, discharging and compensation of our independent auditors;
- oversees the work of our independent auditors;
- approves engagements of the independent auditors to render any audit or permissible non-audit services;
- reviews on a periodic basis, or as appropriate, our investment policy and recommends to the board of directors any changes to such policy;
- reviews company compliance with our investment policy;
- reviews the qualifications, independence and performance of the independent auditors;
- reviews financial statements, critical accounting policies and estimates;
- reviews the adequacy and effectiveness of our internal controls; and
- reviews and discusses with management and the independent auditors the results of our annual audit, our quarterly financial statements and our publicly filed reports.

The current members of our audit committee are Frank Holler, Johnston Evans and Michael Tarnow. Mr. Holler serves as the chair of the committee. All members of our audit committee meet the requirements for financial literacy under the applicable rules and regulations of the SEC and NASDAQ. Our audit committee chair, Mr. Holler, is our audit committee financial expert, as that term is defined under the SEC rules implementing Section 407 of the Sarbanes-Oxley Act of 2002, and possesses financial sophistication, as defined under NASDAQ rules. Under the rules of the SEC and NASDAQ, members of the audit committee must also meet heightened independence standards. Our board of directors has determined that each of Messrs. Holler, Evans and Tarnow meet these heightened independence standards. Our audit committee will operate under a written charter, to be effective prior to the completion of this offering, that satisfies the applicable standards of the SEC and NASDAQ.

During 2013, our audit committee met six times.

Compensation Committee

Our compensation committee oversees our compensation policies, plans and benefits programs. Among other matters, the compensation committee:

- reviews and recommends policies relating to compensation and benefits of our directors, officers and employees;

- reviews and approves corporate goals and objectives relevant to compensation of our chief executive officer and other senior officers;
- evaluates the performance of our officers in light of established goals and objectives;
- recommends compensation of our officers based on its evaluations; and
- administers the issuance of stock options and other awards under our stock plans.

The current members of our compensation committee are Mohammad Azab, Gary Patou and Michael Tarnow. Dr. Azab serves as the chair of the committee. Each of the members of our compensation committee is an independent, outside and non-employee director under the applicable rules and regulations of the SEC, NASDAQ, the Internal Revenue Code of 1986, as amended, and the guidelines contained in National Instrument 58-201—Corporate Governance Guidelines, relating to compensation committee independence. Our compensation committee will operate under a written charter, to be effective prior to the completion of this offering, that satisfies the applicable standards of the SEC and NASDAQ.

During 2013, our compensation committee met four times.

Nominating and Corporate Governance Committee

Our nominating and corporate governance committee oversees and assists our board of directors in reviewing and recommending nominees for election as directors. Among other matters, the nominating and corporate governance committee:

- evaluates and makes recommendations regarding the organization and governance of the board of directors and its committees;
- assesses the performance of members of the board of directors and makes recommendations regarding committee and chair assignments;
- recommends desired qualifications for board of directors membership and conducts searches for potential members of the board of directors; and
- reviews and makes recommendations with regard to our corporate governance guidelines.

The current members of our nominating and corporate governance committee are Mohammad Azab, Gary Patou and Michael Tarnow. Dr. Patou serves as the chair of the committee. Each of the members of our nominating and corporate governance committee is an independent director under the applicable rules and regulations of the SEC and NASDAQ relating to nominating and corporate governance committee independence. Our nominating and corporate governance committee will operate under a written charter, to be effective prior to the completion of this offering, that satisfies the applicable standards of the SEC and NASDAQ.

During 2013, our nominating and corporate governance committee did not meet.

Our board of directors may from time to time establish other committees.

Director Compensation

Pre-IPO Director Compensation Policies

In January 2012, our board of directors established a policy, or the 2012 director compensation policy, with respect to the compensation of directors, effective January 1, 2012.

For the purposes of the director compensation policy, our board of directors classified each director into one of the three following categories: (1) a "management director" is a director who is also an officer, or employed by us in a management role; (2) a "non-management director" is a director who is not an officer, and not employed by us in a management role; and (3) the chair of the board of directors. Management directors receive no compensation for their services on the board of directors.

Our 2012 director compensation policy provides that, effective January 1, 2012, we shall pay a combination of cash compensation and equity compensation to our non-management directors and the chair of our board of directors.

Our 2012 director compensation policy further provides that each of our non-management directors is eligible to receive:

(1) $2,500 for each regular quarterly meeting of the full board of directors that a director attends for the full meeting either in person, or in part in person and in part by teleconference or videoconference, or $1,250 for each regular quarterly meeting that a director attends for the full meeting by teleconference or videoconference, with such amounts payable within 30 days following the date of each board meeting;

(2) upon commencement of service as our director, an option to purchase a number of our common shares determined by our board of directors up to a maximum of 25,000 shares; and

(3) on an annual basis, to be granted on or about January 1 of each year, options as determined by our board of directors as follows:
   - (i) up to a maximum of 5,000 options for service as a director,
   - (ii) up to a maximum of 5,000 additional options for service on our audit committee and/or our compensation committee (or 10,000 additional options for service on both such committees),
   - (iii) up to a maximum of 5,000 additional options for service as chair of our audit committee or as chair of our compensation committee (or 10,000 additional options for service as chair on both such committees),
   - (iv) up to a maximum of 2,000 additional options for service as a member of our nominating and corporate governance committee, and
   - (v) up to a maximum of 2,000 additional options for service as chair of our nominating and corporate governance committee.

Our 2012 director compensation policy further provides that, effective January 1, 2012, the chair of our board of directors receives:

(1) $3,000 for each regular quarterly meeting of the full board of directors that the chair attends for the full meeting, in lieu of the amount the chair may otherwise receive for attendance as a non-management director, with such amount payable within 30 days following the date of each board meeting; and

(2) upon commencement of service, or agreement to continue service as the chair of our board of directors for a six-month term, an option to purchase a number of our common shares determined by our board of directors up to a maximum of 10,000 shares, granted on or about January 1 and July 1.

Our 2012 director compensation policy further provides that in the event that a new chair is appointed before the completion of any six-month period noted above, our board of directors may, at its discretion, grant up to a maximum of 10,000 options to such newly-appointed chair on the date of appointment.

In January 2013, our board of directors amended our director compensation policy by increasing the cash compensation component while maintaining the stock option component of the 2012 director compensation policy.

Our revised director compensation policy, or 2013 director compensation policy, provides that, effective April 1, 2013, each of our non-management directors receives $5,000 for each regular quarterly meeting of the full board of directors that a director attends for the full meeting in person, or $2,000 for each regular quarterly meeting that a director attends for the full meeting either by teleconference or videoconference or in part in person and in part by teleconference or videoconference, with such amounts payable within 30 days following the date of each board meeting.

Our 2013 director compensation policy further provides that, effective January 1, 2013, the chair of our board of directors receives $6,000 for each regular quarterly meeting of the full board of directors that the chair attends for the full meeting, in lieu of the amount the chair may otherwise receive for attendance as a non-management director, with such amount payable within 30 days following the date of each board meeting.

All of the above options will be granted under our then effective equity plan, and will vest pursuant to a three-year vesting schedule, with one-third vesting on the first year anniversary of the grant date, and the remaining two-thirds vesting monthly over the course of the next two years, in equal amounts, on the last day of each month subject to the recipient’s continued service through each vesting date and the terms of our then effective equity plan as described in the section entitled “Management—Employee Benefit and Stock Plans.”

The following table sets forth information concerning the compensation paid or accrued for services rendered to us by members of our board of directors for the year ended December 31, 2013. Dr. Simon Pimstone, our President and Chief Executive Officer, did not receive any additional compensation for service on our board of directors. Compensation paid or accrued for services rendered to us by Dr. Pimstone in his role as chief executive officer is included in our disclosures related to executive compensation in the section of this prospectus captioned “Executive Compensation.”

Name	FEES EARNED OR PAID IN CASH[1] ($)	OPTION AWARDS[2][3] ($)	ALL OTHER COMPENSATION[1][2] ($)	TOTAL[1] ($)
Mohammad Azab [4]	14,500	8,292	—	22,792
Johnston L. Evans [4]	17,500	—	—	17,500
Michael R. Hayden [4]	6,500	13,820	82,921[6]	103,241
Frank A. Holler [4]	17,500	19,348	—	36,848
Gary Patou [4]	17,500	5,528	—	23,028
Evan A. Stein [4]	17,500	2,764	—	20,264
Michael M. Tarnow [4][5]	21,000	24,876	—	45,876

(1) Except as otherwise indicated, compensation amounts that were paid in Canadian dollars have been converted to U.S. dollars for purposes of the table. The U.S. dollar per Canadian dollar exchange rate used for such conversion was 0.9713, which was the average Bank of Canada exchange rate for the 2013 fiscal year.

(2) Represents the aggregate grant date fair value of stock option awards granted in 2013. These amounts have been computed in accordance with Financial Accounting Standards Board, or FASB, Accounting Standards Codification, or ASC, Topic 718, using the Black-Scholes option pricing model without regard to estimated forfeitures. For a discussion of valuation assumptions, see the notes to our financial statements included elsewhere in this prospectus. The exercise price for stock options was denominated in Canadian dollars on the date of grant. The amounts reflected in this column were converted to U.S. dollars using the U.S. dollar per Canadian dollar exchange rate on January 1, 2013, the date of grants, which is 1.0051. For further information regarding the equity compensation of our directors, see the section “Executive Compensation—Employee Benefit and Stock Plans—Amended and Restated Stock Option Plan.”

(3) As of December 31, 2013, the below listed directors beneficially held outstanding options to purchase the number of common shares as follows: Dr. Azab (230,000 shares); Mr. Evans (zero shares); Dr. Hayden (725,000 shares, of which 277,500 shares are held by Dr. Hayden and 447,500 shares are held by Genworks Inc., Dr. Hayden’s consulting company); Mr. Holler (537,000 shares); Dr. Patou (232,000 shares); Dr. Stein (45,000 shares); and Mr. Tarnow (451,000 shares).

(4) Non-management director.

(5) Chair of our board of directors.

(6) Consists of $82,921 in stock options awarded to Genworks Inc., Dr. Hayden’s consulting company as compensation for consulting services.

Grant of Stock Option to Genworks, Inc.

Genworks Inc., or Genworks, is controlled by Dr. Michael Hayden, one of our directors. From time to time, we have paid consulting fees to Genworks in consideration of certain scientific consulting services provided by Dr. Hayden. Pursuant to the terms of our agreement with Genworks, our board of directors has the ability to grant discretionary bonuses to Genworks related to Dr. Hayden’s provision of services as our chief scientific officer. In January 2013, in recognition of the services Dr. Hayden rendered to us in 2012, our board of directors exercised its discretion and granted Genworks an option to purchase 150,000 of our common shares at an exercise price of CAD$0.55 per share. One quarter of the shares underlying this option vest on the first anniversary of the grant date, with the remainder of the shares vesting on a monthly basis over the next three years, subject to Genworks’ continuing status as a service provider to us. While we do retain the services of Genworks from time to time, Dr. Hayden no longer provides services to us as our chief scientific officer.

Post-IPO Director Compensation Policy

In August 2013, our board of directors approved a policy, or the post-IPO director compensation policy, with respect to the compensation of directors that will become effective following our initial public offering and replace our 2013 director compensation policy. For purposes of the policy, our board of directors maintained the categories of management director, non-management director and chair of our board of directors.

Non-management directors and the chair of our board of directors will be eligible to receive compensation in the form of equity and cash under the post-IPO director compensation policy, as described below. Management directors receive no compensation for their services on our board of directors.

Equity Compensation

Each non-management director (including the chair of the board of directors) will be eligible to receive on the date of effectiveness of the registration statement of which this prospectus forms a part, and, if a new director, upon joining the board of directors, an option to purchase 25,000 of our common shares. Beginning in 2015, each non-management director (including the chair of our board of directors) will be eligible to receive, on an annual basis, an option to purchase 15,000 of our common shares.

In addition to the annual grant, the chair of our board of directors will receive an option to purchase 5,000 of our common shares. This additional annual grant will be granted at the same time as and have the same terms and conditions as the annual grant made to each of our non-management directors.

The exercise price per share of each of the above grants will be the fair market value of one of our common shares (determined pursuant to our then-effective equity plan) on the date of the grant. For the option grants to the non-management directors on the effective date of the registration statement of which this prospectus forms a part, the exercise price per share will equal the initial public offering price.

All of the above options granted to our non-management directors (including the chair of our board of directors) will be under our then-effective equity plan. The shares underlying the above initial and annual grants will vest as to one-third of the total shares subject to such award on the one year anniversary of the grant date, one-third of the total shares on the two year anniversary of the grant date and the balance of the total shares on the three year anniversary of the grant date.

The vesting of each grant described above will be subject to the recipient's continued service as a director through each vesting date and the other terms and conditions of our then-effective equity plan and the applicable option agreement with that director.

Cash Compensation

For each fiscal year, each non-management director (including the chair of the board of directors) will receive an annual cash retainer of $35,000 for serving on the board of directors. In addition to the annual retainer, the chair of our board of directors will receive an additional annual cash retainer of $25,000.

The chairs of the three standing committees of our board of directors will be entitled to the following cash retainers for each fiscal year as follows:

BOARD COMMITTEE	CHAIR RETAINER
Audit Committee	$ 15,000
Compensation Committee	$ 10,000
Nominating and Corporate Governance Committee	$ 7,250

The non-chair members of the three standing committees of our board of directors will be entitled to the following cash retainers for each fiscal year as follows:

BOARD COMMITTEE	MEMBER RETAINER
Audit Committee	$ 7,500
Compensation Committee	$ 5,000
Nominating and Corporate Governance Committee	$ 3,750

All cash payments will be payable in four equal installments on the date of our annual meeting, and on the last day of the third month, sixth month and ninth month thereafter, during which such individual served as a director or chair of our board of directors or of the applicable committee (such payments to be prorated for service during a portion of such quarter).

All directors will be reimbursed for standard travel expenses incurred in their capacities as directors and/or committee members.

Compensation Committee Interlocks and Insider Participation

During the fiscal year ended December 31, 2013, Drs. Azab and Patou and Mr. Tarnow served as members of our compensation committee. No such person is currently, or has been at any time, one of our officers or employees. None of our executive officers currently serves, or has served during the last completed three fiscal years, as a member of the board of directors or compensation committee of any other entity that has or had one or more executive officers serving as a member of our board of directors or compensation committee.

Code of Business Conduct and Ethics

We have adopted a written code of business conduct and ethics that will be effective as of the effective date of the registration statement of which this prospectus forms a part and that applies to all of our employees, officers and directors, including those officers responsible for financial reporting. Following the completion of this offering, the code of business conduct and ethics will be available on the investor section of our website at www.xenon-pharma.com. We intend to disclose on our website any amendment to, or waiver of, any provision of our code of business conduct and ethics applicable to our directors and executive officers required to be disclosed under the rules of the SEC and NASDAQ.

Indemnification Agreements and Directors' and Officers' Liability Insurance

We will enter into indemnification agreements with each of our directors and officers. For further information regarding the indemnification agreements with each of our directors and officers, see the section titled "Certain Relationships and Related Party Transactions—Indemnification Agreements and Directors' and Officers' Liability Insurance."

Under the Canada Business Corporations Act, or CBCA, we may indemnify our current or former directors or officers or any other individuals who act or have acted at our request as a director or officer, or an individual acting in a similar capacity, of another entity, against all costs, charges, and expenses, including an amount paid to settle an action or satisfy a judgment, reasonably incurred by the individual in respect of any civil, criminal, administrative, investigative or other proceeding in which the individual is involved because of his or her association with us or the other entity. The CBCA also provides that we may advance moneys to a director, officer or other individual for costs, charges and expenses reasonably incurred in connection with such a proceeding. The individual shall repay the moneys to us if indemnification of the individual is ultimately prohibited under the CBCA, as described below.

Indemnification is prohibited under the CBCA unless the individual:

- acted honestly and in good faith with a view to our best interests, or the best interests of the other entity for which the individual acted as director or officer or in a similar capacity at our request;
- in the case of a criminal or administrative action or proceeding that is enforced by a monetary penalty, the individual had reasonable grounds for believing that his or her conduct was lawful; and
- was not judged by the court or other competent authority to have committed any fault or omitted to do anything that the individual ought to have done.

Our by-laws require us to indemnify each of our directors, officers, former directors or officers or persons who act or acted at our request as a director or officer, or an individual acting in a similar capacity, of another body corporate to the fullest extent permitted under the CBCA. We will indemnify such individual against all costs, charges and expenses, including an amount paid to settle an action or proceeding to which the individual is made a party by reason of being or having been a director of officer of us or such body corporate. However, we shall not indemnify such individual if the individual did not act honestly and in good faith with a view to our best interests or, in the case of a criminal or administrative action or proceeding that is enforced by a monetary penalty, the individual did not have reasonable grounds for believing that his or her conduct was lawful.

Our by-laws authorize us, with the approval of our board of directors, to purchase and maintain insurance for the benefit of any persons our board of directors may from time to time determine.

EXECUTIVE COMPENSATION

2013 Summary Compensation Table

The following table provides information regarding the compensation of our named executive officers during the year ended December 31, 2013.

Name and Principal Position	YEAR	SALARY [1]	BONUS [1]	OPTION AWARDS [2]	NON-EQUITY INCENTIVE PLAN [1][3]	ALL OTHER COMPENSATION [1]	TOTAL [1]
Simon N. Pimstone	2013	$369,851	$ —	$ 190,867	$115,578	$20,639[4]	$696,935
President and Chief Executive Officer	2012	366,371	100,060[5]	113,571	183,185	18,519[4]	781,706
Ian C. Mortimer Chief Financial Officer	2013	64,169	9,713[6]	402,465	19,749	3,411[7]	499,507
Y. Paul Goldberg	2013	281,010	3,450[8]	35,932	59,012	16,197[9]	395,601
Vice President, Clinical Development	2012	278,365	25,015[5]	15,143	83,507	14,072[9]	416,102

(1) Except as otherwise indicated, compensation amounts were paid in Canadian dollars and have been converted to U.S. dollars for purposes of the table. For 2013, the U.S. dollar per Canadian dollar exchange rate used for such conversion was 0.9713 which was the average Bank of Canada exchange rate for the 2013 fiscal year. For 2012, the U.S. dollar per Canadian dollar exchange rate used for such conversion was 1.0006 which was the average Bank of Canada exchange rate for the 2012 fiscal year.

(2) Represents the aggregate grant date fair value of stock option awards granted in 2013. These amounts have been computed in accordance with Financial Accounting Standards Board, or FASB, Accounting Standards Codification, or ASC, Topic 718, using the Black-Scholes option pricing model without regard to estimated forfeitures. For a discussion of valuation assumptions, see the notes to our financial statements included elsewhere in this prospectus and the critical accounting policy discussions in the section titled “Management’s Discussion and Analysis of Financial Condition and Results of Operation — Critical Accounting Policies — Share-Based Compensation”. The exercise price for stock options were denominated in Canadian dollars on the date of grant. The amounts reflected in this column were converted to U.S. dollars using the U.S. dollar per Canadian dollar exchange rate on January 1, 2012, September 24, 2012, January 1, 2013, January 14, 2013 and August 1, 2013, the dates of grant, which is 0.9833, 1.0203, 1.0051, 1.0163 and 0.9673, respectively.

(3) The amount represents payments earned in 2012 and 2013 under the 2012 and 2013 Compensation Program Bonus Plan, which were paid in February 2013 and February 2014, respectively as discussed under the sections titled “Executive Compensation —2013 Non-Equity Incentive Plan Payments” and ‘‘Executive Compensation — 2012 Non-Equity Incentive Plan Payments”. Mr. Mortimer’s payment was prorated to reflect the commencement of his employment with us in the fourth quarter of 2013.

(4) Of the total amount for 2013, (i) $596 represents life insurance premiums through our group extended benefit plan, (ii) $1,550 represents provincial health care premiums and (iii) $18,493 represents contributions to our registered retirement savings plan. Of the total amount for 2012, (i) $616 represents life insurance premiums through our group extended benefit plan and (ii) $17,903 represents contributions to our registered retirement savings plan.

(5) These amounts for Drs. Pimstone and Goldberg represent bonus payments earned in 2012, which were paid on a discretionary basis and were related to the successful negotiation and entry into our collaboration with Teva Pharmaceutical Industries Ltd., or Teva. All such amounts were paid in February 2013.

(6) Mr. Mortimer joined our company as the Chief Financial Officer in October 2013. This bonus represents an amount paid in 2013 upon execution of his employment agreement.

(7) Of the total amount, (i) $91 represents life insurance premiums through our group extended benefit plan, (ii) $388 represents provincial health care premiums and (iii) $2,932 represents contributions to our registered retirement savings plan.

(8) This amount represents a discretionary bonus paid in 2013 to Dr. Goldberg in recognition of his efforts related to our preparation for this offering.

(9) Of the total amount for 2013, (i) $596 represents life insurance premiums through our group extended benefit plan, (ii) $1,550 represents provincial health care premiums and (iii) $14,051 represents contributions to our registered retirement savings plan. Of the total amount for 2012, (i) $616 represents life insurance premiums through our group extended benefit plan and (ii) $13,456 represents contributions to our registered retirement savings plan.

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Non-Equity Incentive Plan Compensation

2013 Non-Equity Incentive Plan Payments

For 2013, the target incentive amounts and the aggregate annual payments earned by our named executive officers under our 2013 Compensation Program Bonus Plan were the following:

Named Executive Officer	TARGET AWARD [(1)] OPPORTUNITY	% ACHIEVEMENT	ACTUAL AWARD AMOUNT
Simon N. Pimstone	$ 184,926	62.5%	$115,578
Ian C. Mortimer[(2)]	19,749	100.0	19,749
Y. Paul Goldberg	84,303	70.0	59,012

(1) Except as otherwise indicated, compensation amounts were paid in Canadian dollars and have been converted to U.S. dollars for purposes of the table. The U.S. dollar per Canadian dollar exchange rate used for such conversion was 0.9713 which was the average Bank of Canada exchange rate for the 2013 fiscal year.

(2) Mr. Mortimer joined our company as the Chief Financial Officer in October 2013. This bonus represents an amount paid in 2013 upon execution of his employment agreement.

2012 Non-Equity Incentive Plan Payments

For 2012, the target incentive amounts and the aggregate annual payments earned by our named executive officers under our 2012 Compensation Program Bonus Plan were the following:

Named Executive Officer	TARGET AWARD [(1)] OPPORTUNITY	ACTUAL AWARD AMOUNT
Simon N. Pimstone	$ 183,185	$ 183,185
Y. Paul Goldberg	83,507	83,507

(1) Except as otherwise indicated, compensation amounts were paid in Canadian dollars and have been converted to U.S. dollars for purposes of the table. The U.S. dollar per Canadian dollar exchange rate used for such conversion was 1.0006 which was the average Bank of Canada exchange rate for the 2012 fiscal year.

Annual Performance-Based Bonus Plan

Our 2013 Compensation Program Bonus Plan provides our named executive officers with an opportunity for an annual incentive compensation payment for achievement of our corporate performance goals as well as individual performance. The target annual opportunity for each of our named executive officers remained unchanged from 2012. The annual incentive payments are calculated by weighting corporate goal attainment and individual goal attainment for each named executive officer. For 2013, the corporate and individual weighting was 80% corporate with the remainder tied to individual goals for Dr. Goldberg, 100% individual for Mr. Mortimer, and 100% corporate for Dr. Pimstone. Our 2013 corporate-level goals included establishing proof-of-concept data for topical TV-45070, declaring a new product candidate as a development track candidate, securing funding for at least 22 full-time employees, completing at least one new pharmaceutical collaboration and operating within our planned budget for the fiscal year. For 2013, our board of directors determined that we achieved 62.5% of our corporate-level goals. Our board of directors determined that Dr. Goldberg achieved 70% of his individual objectives and Mr. Mortimer achieved 100% of his individual objectives.

Our 2012 Compensation Program Bonus Plan provides our named executive officers with an opportunity for an annual incentive compensation payment subject to achievement of our corporate performance goals as well as individual performance. For 2012, our corporate-level goals included establishing proof-of-concept data for topical TV-45070, declaring a new product candidate as a development track candidate, securing funding for at least 20 full-time employees, completing at least one new pharmaceutical collaboration and operating within our planned budget for the fiscal year. For 2012, we achieved all of our corporate-level goals at target levels. The individual goals for 2012 related generally to each named executive officer’s overall contributions in his or her roles towards reaching our corporate goals. The following was our determination of individual goal attainment in 2012: Dr. Pimstone, 100%; and Dr. Goldberg, 100%. The target bonus percentage for each of our named executive officers was determined through executive employment arrangements, set forth below. The annual incentive payments are calculated by weighing corporate goal attainment and individual goal attainment for each named executive officer at 75% corporate/25% individual for Dr. Goldberg and 100% corporate for Dr. Pimstone.

Discretionary Bonuses

Our board of directors may, in certain circumstances, authorize the payment of discretionary bonuses to our executive officers and other employees. For 2012, each of Drs. Pimstone and Goldberg were awarded a discretionary bonus by our board of directors in connection with their involvement with the successful negotiation and execution of our collaborative arrangement with Teva. Also, in 2013, Dr. Goldberg was awarded a discretionary bonus by our board of directors in recognition of his efforts related to our preparation for this offering.

Executive Employment Arrangements

Dr. Simon N. Pimstone

We entered into an employment agreement on December 7, 2004 with Dr. Pimstone, our President and Chief Executive Officer. The employment agreement is for an indefinite term. Dr. Pimstone's current annual base salary is CAD$392,202, and he is eligible for an annual incentive payment up to 50% of his base salary, subject to achievement of performance metrics. The employment agreement also provides for severance benefits if Dr. Pimstone is terminated without cause. We anticipate entering into an amended employment agreement with Dr. Pimstone prior to the completion of this offering, which we expect to provide enhanced severance and post-termination benefits. For details regarding our current obligations under such circumstances, please see "Termination Benefits" below.

Mr. Ian C. Mortimer

We entered into an employment agreement on August 1, 2013 with Mr. Mortimer and Mr. Mortimer joined us on a full time basis effective October 21, 2013 as our Chief Financial Officer. Mr. Mortimer's current annual base salary is CAD$311,100, and he is eligible for an annual incentive payment up to 40% of his base salary, subject to achievement of performance metrics. The employment agreement also provides for severance benefits if Mr. Mortimer is terminated without cause. We anticipate entering into an amended employment agreement with Mr. Mortimer prior to the completion of this offering, which we expect to provide additional severance and post-termination benefits. For details regarding our current obligations to Mr. Mortimer under such circumstances, please see "Termination Benefits" below.

Dr. Y. Paul Goldberg

We entered into an employment agreement on October 13, 2000 with Dr. Goldberg, our Vice President of Clinical Development. The employment agreement is for an indefinite term. Dr. Goldberg's current annual base salary is CAD$299,439, and he is eligible for an annual incentive payment up to 35% of his base salary, subject to achievement of performance metrics. The employment agreement also provides for severance benefits if Dr. Goldberg is terminated without cause. We anticipate entering into an amended employment agreement with Dr. Goldberg prior to the completion of this offering, which we expect to provide enhanced severance and post-termination benefits. For details regarding our current obligations under such circumstances, please see "Termination Benefits" below.

Ms. Karen Corraini

We entered into an employment agreement on May 15, 2001 with Ms. Corraini, our General Counsel and Corporate Secretary. The employment agreement is for an indefinite term. Ms. Corraini's current annual base salary is CAD$261,353, and she is eligible for an annual incentive payment up to 35% of her base salary, subject to achievement of performance metrics. The employment agreement also provides for severance benefits if Ms. Corraini is terminated without cause. We anticipate entering into an amended employment agreement with Ms. Corraini prior to the completion of this offering. For details regarding our current obligations under such circumstances, please see "Termination Benefits" below.

Dr. Robin Sherrington

We entered into an employment agreement on February 12, 2001 with Dr. Sherrington, our Senior Vice President of Business and Corporate Development. The employment agreement is for an indefinite term. Dr. Sherrington's current annual base salary is CAD$255,397, and he is eligible for an annual incentive payment up to 35% of his base salary, subject to achievement of performance metrics. The employment agreement also provides for severance benefits if Dr. Sherrington is terminated without cause. We anticipate entering into an amended employment agreement with Dr. Sherrington prior to the completion of this offering. For details regarding our current obligations under such circumstances, please see “Termination Benefits” below.

Termination Benefits

Dr. Pimstone’s agreement provides that we may terminate his employment without cause, if we give him twelve months’ written notice, or a payment equal to twelve months’ base salary only, or any equivalent combination of working notice and base salary in lieu of notice. In addition, our board of directors will, in good faith, negotiate the vesting terms of Dr. Pimstone’s then unvested share options.

Dr. Goldberg’s agreement provides that we may terminate his employment without cause, if we pay him eight months’ salary in lieu of notice.

Mr. Mortimer’s agreement provides that we may terminate his employment without cause, if we give him twelve months’ written notice, or a payment equal to twelve months’ base salary only, or any equivalent combination of working notice and base salary in lieu of notice.

Ms. Corraini’s agreement provides that we may terminate her employment without cause, if we pay her twelve months’ money in lieu of notice.

Dr. Sherrington’s agreement provides that we may terminate his employment without cause, if we pay him eight months’ money in lieu of notice.

Prior to the completion of this offering, we expect to enter into amended employment agreements with each of Drs. Pimstone, Goldberg and Sherrington, Mr. Mortimer and Ms. Corraini.

Our named executive officers are not entitled to special benefits upon a change in control, except for the potential vesting acceleration of their stock options. For a description of such benefits, see below under “– Outstanding Equity Awards of Fiscal Year-End” and “Employee Benefit Plans.”

Outstanding Equity Awards at Fiscal Year-End

The following table presents information concerning equity awards held by our named executive officers at December 31, 2013.

NAME	OPTION AWARDS				
	VESTING COMMENCEMENT DATE	NUMBER OF SECURITIES UNDERLYING UNEXERCISED OPTIONS (#)		OPTION EXERCISE PRICE (CAD$)	OPTION EXPIRATION DATE
		EXERCISABLE	UNEXERCISABLE		
Simon N. Pimstone	1/1/2004	75,000 (1)	—	1.25	12/31/2013
	10/1/2004	25,000 (1)	—	1.25	9/30/2014
	1/11/2005	75,000 (1)	—	1.25	1/10/2015
	8/1/2006	60,000 (1)	—	0.77	7/31/2016
	1/1/2008	50,000 (1)	—	0.77	12/31/2017
	6/27/2008	175,000 (1)	—	0.77	6/26/2018
	1/1/2009	45,000 (1)	—	0.77	12/31/2018
	9/1/2009	60,000 (1)	—	0.77	8/31/2019
	1/1/2010	30,000 (1)	—	0.77	12/31/2019
	1/1/2011	82,500 (1)	27,500 (1)	0.77	12/31/2020
	1/1/2012	50,000 (1)	50,000 (1)	0.77	12/31/2021
	1/1/2012	25,000 (1)	25,000 (1)	0.77	12/31/2021
	1/1/2013	—	200,000 (1)	0.55	12/31/2022
	3/10/2013	—	150,000 (1)	0.55	3/9/2023
Ian C. Mortimer	8/1/2013	—	207,000 (1)	2.01	7/31/2023
Y. Paul Goldberg	1/1/2004	6,000 (1)	—	1.25	12/31/2013
	10/1/2004	5,000 (1)	—	1.25	9/30/2014
	1/11/2005	10,000 (1)	—	1.25	1/10/2015
	1/1/2006	2,000 (1)	—	1.25	12/31/2015
	1/1/2007	10,000 (1)	—	0.77	12/31/2016
	1/1/2008	5,000 (1)	—	0.77	12/31/2017
	1/1/2009	25,000 (1)	—	0.77	12/31/2018
	1/1/2010	30,000 (1)	—	0.77	12/31/2019
	7/2/2010	16,500 (2)	1,500 (2)	0.77	7/1/2020
	12/2/2010	16,944 (2)	3,056 (2)	0.77	12/1/2020
	1/1/2011	90,000 (1)	30,000 (1)	0.77	12/31/2020
	1/1/2011	33,333 (2)	6,667 (2)	0.77	12/31/2020
	1/1/2012	5,000 (1)	5,000 (1)	0.77	12/31/2021
	1/1/2012	6,667 (2)	3,333 (2)	0.77	12/31/2021
	1/1/2013	2,500 (2)	2,500 (2)	0.55	12/31/2022
	1/1/2013	—	40,000 (1)	0.55	12/31/2022
	1/1/2013	—	20,000 (1)	0.55	12/31/2022

(1) Options vest over four years as follows: 25% of the shares vest one year following the vesting commencement date, with the remaining 75% vesting in equal monthly installments over the following three years. Notwithstanding the foregoing, if the named executive officer's employment is terminated other than for cause, because of death or disability or resigns for good reason, in each case, during the period beginning on, and ending 12 months after, a change in control, then 100% of the then-unvested shares vest.

(2) Options vest over four years as follows: one-third of the shares vest on the vesting commencement date, with the remaining two-thirds vesting in equal monthly installments over the following four years. Notwithstanding the foregoing, if the named executive officer's employment is terminated other than for cause, because of death or disability, or resigns for good reason, in each case, during the period on, and 12 months after, a change in control, then 100% of the then-unvested shares vest.

Employee Benefit and Stock Plans

2014 Equity Incentive Plan

In October 2013, our compensation committee adopted a 2014 Equity Incentive Plan, which was amended by our board of directors in April 2014. The 2014 Equity Incentive Plan, as amended, or the 2014 Equity Incentive Plan, was approved by our shareholders in June 2014. The 2014 Equity Incentive Plan will be effective one business day prior to the effective date of the registration statement of which this prospectus forms a part. Excluding option grants made to our non-management directors on the effective date of the registration statement of which this prospectus forms a part, we do not expect to use the 2014 Equity Incentive Plan until after the completion of this offering. Our 2014 Equity Incentive Plan will provide for the grant of incentive share options, which are "incentive stock options" within the meaning of Section 422 of the Internal Revenue Code, to our employees and any subsidiary corporations' employees, and for the grant of nonstatutory share options, restricted share, restricted share units, share appreciation rights, and performance shares to our employees, officers, directors and consultants and those of our subsidiary corporations.

The 2014 Equity Incentive Plan will continue in effect for a term of ten (10) years from the date adopted, unless terminated earlier as permitted under the 2014 Equity Incentive Plan's provisions.

Authorized Shares. We reserved a total of 2,000,000 common shares for issuance pursuant to the 2014 Equity Incentive Plan of which no awards are issued and outstanding. The number of shares available for issuance under the 2014 Equity Incentive Plan will increase annually on the first business day of each fiscal year beginning in 2015 by an amount which shall be determined by the board of directors on or before the first business day of each fiscal year, such amount to be equal to the least of:

- 5,000,000 common shares;
- 4% of the outstanding common shares on the last business day of the immediately preceding fiscal year; or
- such other amount as the board of directors may determine.

Plan Administration. Our board of directors, or one or more committees appointed by our board of directors, will administer the 2014 Equity Incentive Plan. Subject to the provisions of our 2014 Equity Incentive Plan, the administrator has the power to determine the eligible persons to whom awards may be granted, the number of common shares to be covered by each award, the exercise price (provided that such exercise price may not be less than the lowest permitted under all applicable law), the forms of award agreements for use under the 2014 Equity Incentive Plan, and terms and conditions of any award. In the case of awards intended to qualify as "performance-based compensation" within the meaning of Section 162(m) of the U.S. Internal Revenue Code, the committee will consist of two or more "outside directors" within the meaning of Section 162(m). In addition, if our board of directors determines it is desirable to qualify transactions under the 2014 Equity Incentive Plan as exempt under Rule 16b-3 of the Securities Exchange Act of 1934, as amended, or the Exchange Act, such transactions will be structured to satisfy the requirements for exemption under Rule 16b-3. Subject to the provisions of our 2014 Equity Incentive Plan, the administrator has the power to administer the plan, including but not limited to, the power to interpret the terms of the 2014 Equity Incentive Plan and awards granted under it, to create, amend and revoke rules relating to the 2014 Equity Incentive Plan, including creating sub-plans, and to determine the terms of the awards, including the exercisability of the awards and the form of consideration, if any, payable upon exercise. The administrator also has the authority to amend existing awards to reduce or increase their exercise price, to allow participants the opportunity to transfer outstanding awards to a financial institution or other person or entity selected by the administrator, and to institute an exchange program by which outstanding awards may be surrendered in exchange for awards of the same type which may have a higher or lower exercise price or different terms, awards of a different type and/or cash.

Share Options. We may grant share options under the 2014 Equity Incentive Plan. The exercise price of options granted under our 2014 Equity Incentive Plan must at least be equal to the fair market value of our common shares on the date of grant, provided that such price may not be less than the lowest exercise price permitted under applicable law. The term of an incentive share option may not exceed 10 years, except that with respect to any participant who owns more than 10% of the voting power of all classes of our outstanding shares, the term must not exceed five years and the exercise price must equal at least 110% of the fair market value on the grant date. The administrator will determine the methods of payment of the exercise price of an option, which may include cash, shares or other property acceptable to the administrator, as well as other types of consideration permitted by applicable law. After the termination of service of an employee, director or consultant, he or she may exercise his or her option for the period of time stated in his or her option agreement. Generally, the option will remain exercisable for 365 days if termination is due to death or disability or for 180 days if termination is due to retirement. In all other cases, the option will generally remain exercisable for 90 days following the termination of service. However, in no event may an option be exercised later than the expiration of its term except in certain circumstances where the expiration occurs during a blackout period as described more fully in the 2014 Equity Incentive Plan. Subject to the provisions of our 2014 Equity Incentive Plan, the administrator determines the other terms of options.

Share Appreciation Rights. We may grant share appreciation rights under our 2014 Equity Incentive Plan. Share appreciation rights allow the recipient to receive the appreciation in the fair market value of our common shares between the exercise date and the date of grant. Share appreciation rights may not have a term exceeding 10 years. After the termination of service of an employee, director or consultant, the same expiration rules described above for options apply to share appreciation rights. Subject to the provisions of our 2014 Equity Incentive Plan, the administrator determines the other terms of share appreciation rights, including when such rights become exercisable and whether to pay any increased appreciation in cash or with our common shares, or a combination thereof, except that the per share exercise price for the shares to be issued pursuant to the exercise of a share appreciation right will be no less than 100% of the fair market value per share on the date of grant.

Restricted Shares. We may grant restricted share awards under our 2014 Equity Incentive Plan. Restricted share awards are grants of common shares that vest in accordance with terms and conditions established by the administrator. The administrator will determine the number of restricted share awards granted to any employee, director or consultant and, subject to the provisions of our 2014 Equity Incentive Plan, will determine the terms and conditions of such awards. The administrator may impose whatever conditions to vesting it determines to be appropriate (for example, the administrator may set restrictions based on the achievement of specific performance goals or continued service to us); provided, however, that the administrator, in its sole discretion, may accelerate the time at which any restrictions will lapse or be removed. Recipients of restricted share awards generally will have voting and dividend rights with respect to such shares upon grant without regard to vesting, unless the administrator provides otherwise. Restricted share awards that do not vest are subject to our right of repurchase or forfeiture.

Restricted Share Units. We may grant restricted share units under our 2014 Equity Incentive Plan. Restricted share units are bookkeeping entries representing an amount equal to the fair market value of one of our common shares. Subject to the provisions of our 2014 Equity Incentive Plan, the administrator determines the terms and conditions of restricted share units, including the vesting criteria (which may include accomplishing specified performance criteria or continued service to us) and the form and timing of payment (which may consist of any combination of cash or common shares). Notwithstanding the foregoing, the administrator, in its sole discretion may accelerate the time at which any restrictions will lapse or be removed.

Performance Shares. We may grant performance shares under our 2014 Equity Incentive Plan. Performance shares are awards that will result in a payment to a participant only if performance goals established by the administrator are achieved or the awards otherwise vest. The administrator will establish organizational or individual performance goals or other vesting criteria in its discretion, which, depending on the extent to which they are met, will determine the number and/or the value of performance shares to be paid out to participants. After the grant of performance shares, the administrator, in its sole discretion, may reduce or waive any performance criteria or other vesting provisions for such performance shares. Performance shares shall have an initial value equal to the fair market value of our common shares on the grant date. The administrator, in its sole discretion, may pay earned performance shares in the form of cash, in shares or in some combination thereof.

Outside Directors. Our 2014 Equity Incentive Plan provides that all outside directors will be eligible to receive all types of awards (except for incentive stock options) under the 2014 Equity Incentive Plan. In connection with this offering, we intend to implement a formal policy pursuant to which our outside directors will be eligible to receive equity awards under the 2014 Equity Incentive Plan. Our 2014 Equity Incentive Plan provides that in any given year an outside director will not receive (i) cash-settled awards having a grant date fair value greater than $500,000, increased to $1,000,000 in connection with his or her initial service; and (ii) share-settled awards having a grant date fair value greater than $500,000, increased to $1,000,000 in connection with his or her initial service, in each case, as determined under generally accepted accounting principles.

Non-Transferability of Awards. Unless the administrator provides otherwise, our 2014 Equity Incentive Plan generally will not allow for the transfer of awards and only the recipient of an award may exercise an award during his or her lifetime.

Certain Adjustments. In the event of certain changes in our capitalization, to prevent diminution or enlargement of the benefits or potential benefits available under the 2014 Equity Incentive Plan, the administrator will adjust the number and class of shares that may be delivered under the 2014 Equity Incentive Plan and/or the number, class, and price of shares covered by each outstanding award, and the numerical share limits set forth in the 2014 Equity Incentive Plan.

Merger or Change in Control. Our 2014 Equity Incentive Plan provides that in the event of a merger or change in control, as defined under the 2014 Equity Incentive Plan, each outstanding award will be treated as the administrator determines, except that if a successor corporation or its parent or subsidiary does not assume or substitute an equivalent award for any outstanding award, then such award will fully vest, all restrictions on such award will lapse, all performance goals or other vesting criteria applicable to such award will be deemed achieved at 100% of target levels and such award will become fully exercisable, if applicable, for a specified period prior to the transaction. The award will then terminate upon the expiration of the specified period of time. If the service of an outside director is terminated on or following a change of control, other than pursuant to a voluntary resignation, his or her options and share appreciation rights will vest fully and become immediately exercisable, all restrictions on his or her restricted shares and restricted share units will lapse, and with respect to his or her performance shares, all performance goals or other vesting requirements will be deemed achieved at 100% of target levels and all other terms and conditions met.

Amendment, Termination. The administrator will have the authority to amend, suspend or terminate the 2014 Equity Incentive Plan provided such action does not impair the existing rights of any participant. Our 2014 Equity Incentive Plan will automatically terminate in 2024, unless we terminate it sooner pursuant to the provisions of the 2014 Equity Incentive Plan.

Amended and Restated Stock Option Plan

Our Amended and Restated Stock Option Plan, or our Stock Plan, was initially adopted by our board of directors and shareholders in June 1999. Our Stock Plan permits the grant of stock options to our directors, officers and other Service Providers (as defined in the Stock Plan). Our Stock Plan was most recently amended and restated in November 2013. In connection with this offering, we expect to terminate our Stock Plan with respect to any future grant of options and upon such termination, no other securities will be granted pursuant to the Stock Plan; however, our Stock Plan will continue to govern the terms and conditions of outstanding options granted thereunder.

Authorized Shares. The maximum aggregate number of our common shares reserved for issuance under the Stock Plan is 7,800,000 shares. Any common shares for which an option had been exercised are not included in determining whether the maximum number of common shares had been reached.

Plan Administration. Subject to the provisions of our Stock Plan, our board of directors has the power to determine the directors, officers and other Service Providers to whom options may be granted; to determine terms and conditions of options; and to extend the period of time following an optionee's termination of service within which the optionee's option may be exercised.

Stock Options. The per share exercise price of each option equals the market price of our common share on the date of grant, and each option has a term of up to 10 years, subject to earlier termination upon an optionee's termination of service. After an optionee's termination of service, the optionee may exercise his or her option, to the extent vested as of such date of termination, (i) until 5:00 p.m. Vancouver time on the date of termination if the optionee's service was terminated for cause (as determined by us in our sole discretion), (ii) for 365 days following a termination of the optionee's service due to death or disability, or (iii)(a) for optionees other than non-employee and non-consultant directors, 90 days following a termination of the optionee's service for any other reason and (b) for options of our directors other than those directors that are employees or consultants, 24 months following a termination of the optionee's service, each for any other reason. As of the effective date of the registration statement of which this prospectus forms a part, the time periods in (iii)(a) and (iii)(b) of the previous sentence shall be changed to 30 days. In no event may an option be exercised later than the expiration of its term. Our board of directors determined the remaining terms and conditions of an option, as our board of directors, in its discretion, deemed to be consistent with the Stock Plan. The specific terms of any grant of stock options are set forth in an award agreement between us and the recipient.

Transferability. Optionees may not assign their options or their rights under the Stock Plan.

Certain Adjustments. In the event of certain changes in our capitalization, to prevent diminution or enlargement of the benefits or potential benefits available under the Stock Plan, our board of directors may make proportional adjustments to the number of common shares that may be delivered under the Stock Plan and/or the number and price of shares covered by each outstanding option.

Merger, Dissolution, Liquidation, or other Change of Control. Our Stock Plan provides that in the event of a dissolution, liquidation, sale of all or substantially all of our assets; merger, consolidation, amalgamation, arrangement or reorganization in which we are not the surviving corporation; reverse merger in which we are the surviving corporation but our common shares are converted into other property; or an acquisition by any person, entity or group within the meaning of Section 13(d) of the Exchange Act of our securities representing at least 35% of the combined voting power entitled to vote in an election of directors, which we collectively refer to as a Change of Control, any successor corporation shall assume our obligations in respect of all outstanding options under our Stock Plan or shall substitute an equivalent option for all outstanding options under the Stock Plan. If a successor corporation does not assume or substitute for an outstanding option, then any options held by persons who are directors, officers, or Service Providers generally will fully vest and the time during which such option may be exercised shall be accelerated prior to the completion of the Change of Control. All options that are not assumed or are not substituted for will terminate unless exercised prior to the Change of Control. In the event of our merger into another corporation or other entity or any other Change of Control in which the options are assumed or substituted for by a successor corporation, the assumed options or the substitute options held by a director, officer or Service Provider will become fully vested and exercisable if, within 12 months following the Change of Control, either (i) the optionee's service is terminated by us or the successor corporation other than for Cause (as defined in the Stock Plan) or (ii) the optionee resigns for Good Reason (as defined in the Stock Plan).

Plan Amendment. Subject to any required regulatory approval, we may amend the Stock Plan at any time, provided that such amendment does not impair the existing rights of any optionee under any then-outstanding option.

Retirement and Pension Benefits

Our registered retirement savings plan, or RRSP Plan, provides Canadian resident employees with an opportunity to participate in a retirement savings plan. This type of retirement plan is a Canadian retirement plan with features similar to a 401(k) plan or an individual retirement account administered in the U.S. All of our named executive officers are eligible to participate in all of our employee benefit plans, in each case on the same basis as other employees. Under our current RRSP Plan, we match 100% of employee contributions by eligible employees up to a maximum of 5% of the employee's salary.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

The following is a description of transactions since January 1, 2011 to which we have been a party, in which the amount involved exceeds $120,000, and in which any of our directors, executive officers, or holders of more than 5% of our shares, or an affiliate or immediate family member thereof, had or will have a direct or indirect material interest, other than compensation arrangements which are described under the sections of this prospectus captioned “Management—Director Compensation” and “Executive Compensation.”

Related Person Transaction Policy

We have adopted a formal, written policy, which will become effective as of the effective date of the registration statement of which this prospectus forms a part, that our executive officers, directors (including director nominees), holders of more than 5% of any class of our voting securities, and any member of the immediate family of or any entities affiliated with any of the foregoing persons, are not permitted to enter into a related party transaction with us without the prior approval or, in the case of pending or ongoing related party transactions, ratification of our audit committee. For purposes of our policy, a related party transaction is a transaction, arrangement or relationship where we were, are or will be involved and in which a related party had, has or will have a direct or indirect material interest, other than transactions available to all of our employees.

Consulting Services Provided by Genworks, Inc.

Genworks Inc., or Genworks, is controlled by Dr. Michael Hayden, one of our directors. Consulting fees have been paid to Genworks in consideration of certain scientific consulting services provided by Dr. Hayden. During the fiscal years ended December 31, 2011, 2012, and 2013, and the six months ended June 30, 2014, we incurred cash consulting fees to Genworks in the amount of $278,622, $307,264, and $0, and $0, respectively. These amounts were paid in Canadian dollars and have been converted to U.S. dollars based on the average annual U.S. dollar per Canadian dollar exchange rate for the applicable year in which the amounts were paid. The U.S. dollar per Canadian dollar exchange rate used for such conversions is 1.0117, 1.0006, and 0.9713 respectively.

Pursuant to the terms of our agreement with Genworks, our board of directors has the ability to grant discretionary bonuses to Genworks related to Dr. Hayden’s provision of services as our chief scientific officer. In January 2013, in recognition of the services Dr. Hayden rendered to us in 2012, our board of directors exercised its discretion and granted Genworks an option to purchase 150,000 of our common shares at an exercise price of CAD$0.55 per share. In January 2012, in recognition of the services Dr. Hayden rendered to us in 2011, our board of directors exercised its discretion and granted Genworks an option to purchase 50,000 of our common shares at an exercise price of CAD$0.77 per share. One quarter of the shares underlying these options vest on the first anniversary of the grant date, with the remainder of the shares vesting on a monthly basis over the next three years, subject to Genworks’ continuing status as a service provider to us.

In addition to the options granted to Genworks, our board of directors awarded a performance bonus to Genworks in acknowledgment of services provided prior to September 1, 2012 relating to our sublicense agreement with uniQure Biopharma B.V., or uniQure. Pursuant to the terms of this performance bonus award, in the event that we receive royalty payments from uniQure satisfying certain pre-specified thresholds, Genworks has a right to receive a portion of such royalty payments, totaling up to CAD$600,000. Excluding any amounts owing to Genworks pursuant to the performance bonus relating to uniQure, as of September 1, 2012, no further cash consulting fees are payable to Genworks under such consulting agreement. While we do retain the services of Genworks from time to time, Dr. Hayden no longer provides services to us as our chief scientific officer.

Clinical and Regulatory Services Provided by Medpace, Inc.

During the fiscal years ended December 31, 2011 and 2012, we incurred contract research organization, or CRO, fees to Medpace, Inc., or Medpace, in the amount of $876,474 and $150,915, respectively. Dr. Evan A. Stein, one of our directors, is a former equityholder and former director of Medpace. These CRO fees were paid to Medpace in consideration of certain clinical development services provided by Medpace during this period by individuals other than Dr. Stein. None of these fees were paid directly to Dr. Stein. We are not currently party to a consulting agreement with Medpace and we do not expect to engage Medpace for CRO services in the future. The fees paid to

Medpace did not exceed five percent of the consolidated gross revenue of Medpace during any of these fiscal years and we made no payments to Medpace in 2013 or during the six months ended June 30, 2014.

Investor Rights Agreement

We have entered into an amended and restated investor rights agreement, dated December 6, 2006, as amended, with certain holders of our preferred shares, including entities affiliated with Fidelity Investments, entities affiliated with InterWest Partners and entities affiliated with Lipoterx, L.P., which provides these holders with, among other things, certain rights relating to the registration of our common shares. See the section of this prospectus captioned “Description of Share Capital—Registration Rights” for more information about the amended and restated investor rights agreement.

Amendments to Articles of Continuance

In June 2014, our shareholders approved certain amendments to our articles of continuance, which have the effect of, among other things, increasing in the number of common shares issuable upon conversion of our Series E preferred shares if the initial public offering price is below $ per share. We expect to file the amendment effecting this change prior to the closing of this offering. For additional information regarding the conversion provisions of the Series E preferred shares, please see the section of this prospectus captioned “Description of Share Capital.”

Indemnification Agreements and Directors’ and Officers’ Liability Insurance

We will enter into indemnification agreements with each of our directors and officers. As provided by our by-laws, these agreements, among other things, will require us to indemnify each director and officer to the fullest extent permitted by the Canada Business Corporations Act, or CBCA, including indemnification of all costs, charges and expenses reasonably incurred by such person in any action or proceeding, including any action or proceeding by or in right of us, arising out of the person’s services as a director or officer.

Requirements under the Canada Business Corporations Act

Pursuant to the CBCA, directors and officers are required to act honestly and in good faith with a view to the best interests of the company. Under the CBCA, subject to certain limited exceptions, a director who holds a disclosable interest in a material contract or transaction into which we have entered or propose to enter shall not vote on any directors’ resolution to approve the contract or transaction. A director or officer has a disclosable interest in a material contract or transaction if the director or officer is:

- a party to the contract or transaction;
- is a director or officer, or an individual acting in a similar capacity, of a party to the contract or transaction; or
- has a material interest in a party to the contract or transaction.

Generally, as a matter of practice, directors or officers who have disclosed a material interest in any contract or transaction that our board of directors is considering will not take part in any board discussion respecting that contract or transaction. If such directors were to participate in the discussions, they would abstain from voting on any matters relating to matters in which they have disclosed a disclosable interest.

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PRINCIPAL SHAREHOLDERS

The following table sets forth information relating to the beneficial ownership of our common shares as of June 30, 2014 as adjusted to reflect the sale of common shares offered by us in this offering, for:

- each person, or group of affiliated persons, known by us to beneficially own more than 5% of our outstanding common shares;
- each of our named executive officers;
- each of our directors; and
- all current executive officers and directors as a group.

The percentage of beneficial ownership prior to the offering shown in the table is based upon 44,152,979 common shares outstanding as of June 30, 2014, which assumes an initial public offering price of $ per share (the midpoint of the price range set forth on the cover page of this prospectus). The percentage of beneficial ownership after this offering shown in the table is based on common shares outstanding after the closing of this offering, assuming no exercise of the underwriters' option to purchase additional common shares.

Information with respect to beneficial ownership has been furnished by each director, officer or beneficial owner of more than 5% of our common shares. We have determined beneficial ownership in accordance with the rules of the SEC. These rules generally attribute beneficial ownership of securities to persons who possess sole or shared voting power or investment power with respect to those securities. In addition, the rules take into account common shares issuable pursuant to the exercise of stock options or warrants that are either immediately exercisable or exercisable on or before the 60th day after June 30, 2014. Unless otherwise indicated, the persons or entities identified in this table have sole voting and investment power with respect to all shares shown as beneficially owned by them, subject to applicable community property laws.

Except as otherwise noted below, the address for each person or entity listed in the table is c/o Xenon Pharmaceuticals Inc., 200 – 3650 Gilmore Way, Burnaby, British Columbia V5G 4W8, Canada.

NAME OF BENEFICIAL OWNER	NUMBER OF SHARES BENEFICIALLY OWNED	PERCENTAGE OF SHARES BENEFICIALLY OWNED	
		BEFORE OFFERING	AFTER OFFERING
5% and Greater Shareholders			
Entities affiliated with MX Associates, LLP (1)	7,166,853	16.2%	
Entities affiliated with Lipoterx, Ltd. (2)	5,049,373	11.4	
Entities affiliated with InterWest Partners (3)	3,907,094	8.8	
FMR LLC (4)	3,067,853	6.9	
Executive Officers and Directors			
Simon N. Pimstone (5)	1,868,573	4.2	
Ian Mortimer(6)	51,750	*	
Y. Paul Goldberg (7)	333,278	*	
Michael M. Tarnow (8)	659,337	1.5	
Mohammad Azab (9)	220,833	*	
Gary Bridger (10)	91,667	*	
Karen Corraini (11)	296,639	*	
Johnston L. Evans (12)	2,161,046	4.9	
Michael Hayden (13)	1,424,782	3.2	
Frank A. Holler (14)	1,358,714	3.0	
Gary Patou (15)	225,889	*	
Robin Sherrington (16)	294,972	*	
Evan A. Stein (17)	5,096,017	11.5	
Charles J. Cohen (18)	188,854	*	
All current executive officers and directors as a group (14 persons) (19)	14,272,352	29.6	

* Indicates beneficial ownership of less than 1% of the total outstanding common shares.

(1) Consists of 7,166,853 shares held by MX Associates, LLP. Dr. August Troendle, as the managing partner of MX Associates has sole voting and investment power with respect to the shares held by MX Associates, LLP. The address for this entity is 5375 Medpace Way, Cincinnati, Ohio 45227.

(2) Consists of 5,049,373 shares held by Lipoterx, Ltd. ("Lipoterx"). Lipoterx Holdings, LLC, the general partner of Lipoterx, has sole voting and investment power with respect to the shares held by Lipoterx. Dr. Stein, the managing partner of Lipoterx Holdings, LLC has sole voting and investment power with respect to the shares held by Lipoterx. The address for these entities is 25 E. Superior St., Chicago, Illinois 60611.

(3) Consists of (i) 3,728,539 shares held by InterWest Partnership, LP ("IW7") and (ii) 178,555 shares held by InterWest Investors VII, LP ("II7"). InterWest Management Partners VII, LLC ("IMP7"), the general partner of IW7 and II7, has sole voting and investment power with respect to the shares held by IW7 and II7. Harvey B. Cash, Philip T. Gianos, W. Scott Hedrick, W. Stephen Holmes, Gilbert H. Kliman and Arnold L. Oronsky as the managing directors of IMP7 share voting and investment power with respect to the shares held by IW7 and II7. IMP7 has delegated shared voting and investment power with respect to the shares held by IW7 and II7 to Nina Kjellson, one of our former directors. The address for these entities is c/o InterWest Partners, 2710 Sand Hill Road, Suite 200, Menlo Park, California 94025.

(4) Consists of (i) 1,157,981 shares held by Fidelity Select Portfolios: Biotechnology Portfolio; (ii) 10,509 shares held by Fidelity Canadian Opportunities Fund; (iii) 841,146 shares held by Fidelity Canadian Growth Company Fund; and (iv) 826,621 shares by Fidelity Canadian Asset Allocation Fund. Fidelity Management & Research Company ("Fidelity"), 82 Devonshire Street, Boston, Massachusetts 02109, a wholly-owned subsidiary of FMR LLC and an investment adviser registered under Section 203 of the Investment Advisers Act of 1940, is the beneficial owner of 1,389,577 shares as a result of acting as investment adviser to various investment companies registered under Section 8 of the Investment Company Act of 1940. Edward C. Johnson 3d and FMR LLC, through its control of Fidelity, and the funds each has sole power to dispose of the 1,389,577 shares owned by the Funds. Members of the family of Edward C. Johnson 3d, Chairman of FMR LLC, are the predominant owners, directly or through trusts, of Series B voting common shares of FMR LLC, representing 49% of the voting power of FMR LLC. The Johnson family group and all other Series B shareholders have entered into a shareholders' voting agreement under which all Series B voting common shares will be voted in accordance with the majority vote of Series B voting common shares. Accordingly, through their ownership of voting common shares and the execution of the shareholders' voting agreement, members of the Johnson family may be deemed, under the Investment Company Act of 1940, to form a controlling group with respect to FMR LLC. Neither FMR LLC nor Edward C. Johnson 3d, Chairman of FMR LLC, has the sole power to vote or direct the voting of the shares owned directly by the Fidelity Funds, which power resides with the Funds' Boards of Trustees. Fidelity carries out the voting of the shares under written guidelines established by the Funds' Boards of Trustees. Pyramis Global Advisors Trust Company ("PGATC"), 900 Salem Street, Smithfield, Rhode Island, 02917, an indirect wholly-owned subsidiary of FMR LLC and a bank as defined in Section 3(a)(6) of the Securities Exchange Act of 1934, is the beneficial owner of 1,678,276 shares as a result of its serving as investment manager of institutional accounts owning such shares. Edward C. Johnson 3d and FMR LLC, through its control of PGATC, each has sole dispositive power over 1,678,276 shares and sole power to vote or to direct the voting of 1,678,276 shares owned by the institutional accounts managed by PGATC as reported above.

(5) Consists of (i) 934,615 shares held by Dr. Pimstone; (ii) 80,000 shares held by Dr. Pimstone's spouse; and (iii) 853,958 shares issuable upon exercise of options exercisable within 60 days of June 30, 2014.

(6) Consists of 51,750 shares issuable upon exercise of options exercisable within 60 days of June 30, 2014.

(7) Consists of (i) 21,000 shares held by Dr. Goldberg and (ii) 312,278 shares issuable upon exercise of options exercisable within 60 days of June 30, 2014.

(8) Consists of (i) 236,115 shares held by Mr. Tarnow and (ii) 423,222 shares issuable upon exercise of options exercisable within 60 days of June 30, 2014.

(9) Consists of 220,833 shares issuable upon exercise of options exercisable within 60 days of June 30, 2014.

(10) Consists of 91,667 shares issuable upon exercise of options exercisable within 60 days of June 30, 2014.

(11) Consists of (i) 10,000 shares held by Ms. Corraini and (ii) 286,639 shares issuable upon exercise of options exercisable within 60 days of June 30, 2014.

(12) Consists of (i) 1,284,742 shares held by Chancellor V, L.P. ("Chancellor V"); (ii) 673,815 shares held by Chancellor V-A, L.P. ("Chancellor V-A"); and (iii) 202,489 shares held by Citiventure 2000, L.P. ("Citiventure"). Invesco Private Capital, Inc. is the managing member of IPC Direct Associates V, LLC, which is a Managing Director of each of Chancellor V, Chancellor V-A and Citiventure (collectively referred to as the "Invesco Capital Entities"). Mr. Evans is the Head of Invesco Private Capital, Inc. and a member of the investment committee of IPC Direct Associates V, LLC. Accordingly, Mr. Evans shares voting and investment power of the shares held by the Invesco Capital Entities. Mr. Evans disclaims beneficial ownership of these shares except with respect to his pecuniary interest therein.

(13) Consists of (i) 472,971 shares held by Dr. Hayden; (ii) 368,825 shares held by Dr. Hayden's spouse; (iii) 243,819 shares issuable upon exercise of options exercisable within 60 days of June 30, 2014 held by Dr. Hayden; and (iv) 339,167 shares issuable upon exercise of options exercisable within 60 days of June 30, 2014 held by Genworks Inc.

(14) Consists of (i) 843,797 shares held by Mr. Holler and (ii) 514,917 shares issuable upon exercise of options exercisable within 60 days of June 30, 2014.

(15) Consists of 225,889 shares issuable upon exercise of options exercisable within 60 days of June 30, 2014.

(16) Consists of (i) 10,000 shares held by Dr. Sherrington and (ii) 284,972 shares issuable upon exercise of options exercisable within 60 days of June 30, 2014.

(17) Consists of (i) the shares listed in footnote (2) above, which are held by Lipoterx; (ii) 4,700 shares held by the Stein Family LLC for which Dr. Stein serves as the managing member; and (iii) 41,944 shares issuable upon exercise of options exercisable within 60 days of June 30, 2014.

(18) Consists of 188,854 shares issuable upon exercise of options exercisable within 60 days of June 30, 2014.

(19) Consists of (i) 10,192,442 shares beneficially owned by our current executive officers and directors and (ii) 4,079,910 shares issuable upon exercise of options exercisable within 60 days of June 30, 2014.

DESCRIPTION OF SHARE CAPITAL

General

The following is a summary of the material rights of our common shares and new preferred shares, as contained in our articles and by-laws and any amendments thereto, that will be in effect upon completion of the offering. This summary is not a complete description of the share rights associated with our common shares and new preferred shares. For more detailed information, please see the forms of our articles and by-laws that will be in effect upon the closing of this offering, which are filed as exhibits to the registration statement of which this prospectus forms a part.

Upon or immediately prior to the closing of this offering:

- we will cause all of our outstanding Series A preferred shares and Series B preferred shares to convert into an aggregate of 10,431,507 common shares;
- we will cause all of our outstanding Series E preferred shares to convert into 27,117,534 common shares, based upon an assumed initial public offering price of $ per share (the midpoint of the price range set forth on the cover page of this prospectus) and the adjustment provisions relating to our Series E preferred shares described below;
- all of our outstanding subscription rights will automatically convert into an aggregate of 51,810 common shares; and
- we will effect a   -for-   reverse share split of our common and preferred shares.

Each Series E preferred share is convertible at any time at the option of the holder into common shares on a 1:1 basis, subject to certain adjustments. These adjustments differ for some of our outstanding Series E preferred shares depending on the date of issue, resulting in different conversion ratios for different Series E preferred shares. Pursuant to the terms of an amendment to our articles of continuance that we intend to file prior to the closing of this offering, which was approved by our shareholders in June 2014, immediately prior to the closing of this offering, the conversion rights associated with each of our Series E preferred shares will increase by 20% if the initial public offering price is below $ per common share. If the initial public offering price is at or above $ per common share, the conversion rights associated with each of our Series E preferred shares will remain, as described above, on a 1:1 basis, subject to certain adjustments. As a result of this offering and based upon an assumed initial public offering price of $ per common share (the midpoint of the price range set forth on the cover page of this prospectus) all of our outstanding Series E preferred shares will convert into 27,117,534 common shares immediately prior to the closing of this offering. If the initial public offering price is at or above $ per common share, all of our outstanding Series E preferred shares will convert into 22,597,982 common shares immediately prior to the closing of this offering.

Share Capital

Outstanding Shares

As a result, upon closing of this offering, based on the common shares, preferred shares and subscription rights outstanding as of June 30, 2014, our authorized share capital will consist of an unlimited number of common shares, each without par value, of which   will be issued and outstanding, and an unlimited number of new preferred shares, issuable in series, each without par value, none of which will be issued and outstanding.

As of June 30, 2014, we had 7,013,578 common shares issuable pursuant to outstanding options, and we had approximately 337 holders of record of our common shares.

Voting Rights

Under our amended articles that will be in effect upon the closing of this offering, the holders of our common shares will be entitled to one vote for each common share held on all matters submitted to a vote of the shareholders, including the election of directors. Our articles and by-laws to be in effect upon the completion of this offering do not provide for cumulative voting rights. Because of this, the holders of a plurality of the common shares entitled to vote in any election of directors can elect all of the directors standing for election, if they should so choose.

Dividends

Subject to priority rights that may be applicable to any then outstanding new preferred shares, holders of our common shares are entitled to receive dividends, as and when declared by our board of directors in their absolute discretion out of legally available funds. For more information, see the section titled "Dividend Policy."

Liquidation

In the event of our liquidation, dissolution or winding up, holders of our common shares will be entitled to share ratably in the net assets legally available for distribution to shareholders after the payment of all of our debts and other liabilities and the satisfaction of any liquidation preference granted to the holders of any then outstanding new preferred shares.

Rights and Preferences

Our common shares contain no pre-emptive or conversion rights and have no provisions for redemption or repurchase for cancellation, surrender or sinking or purchase funds. There are no provisions in our articles or by-laws requiring holders of common shares to contribute additional capital. The rights, preferences and privileges of the holders of our common shares are subject to and may be adversely affected by, the rights of the holders of any series of new preferred shares that our board of directors may designate and we may issue in the future.

Fully Paid and Nonassessable

All of our outstanding common shares are, and the common shares to be issued pursuant to this offering, when paid for, will be fully paid and nonassessable.

New Preferred Shares

Upon or immediately prior to the closing of this offering, our articles will be amended to delete all references to our Series A preferred shares, Series B preferred shares, Series C preferred shares, Series D preferred shares and Series E preferred shares. Under our amended articles that will be in effect upon the closing of this offering, our board of directors will have the authority to issue, without further action by our shareholders, an unlimited number of new preferred shares, issuable in one or more series, and subject to the provisions of the Canada Business Corporations Act, or CBCA, and to fix such rights, preferences, privileges, restrictions and conditions thereon, including dividend and voting rights, as our board of directors may determine, and such rights, preferences and privileges, including dividend, voting rights and rights relating to the distribution of our assets in the event of liquidation, dissolution or winding up of our affairs, whether, voluntary or involuntary, or any other distribution of our assets among our shareholders for the purpose of winding up our affairs, may be superior to those of our common shares. The issuance of new preferred shares, while providing flexibility in connection with possible acquisitions and other corporate purposes, could adversely affect the voting power of holders of common shares and the likelihood that such holders will receive dividend payments and payments upon liquidation. In addition, the issuance of new preferred shares could, among other things, have the effect of delaying, deferring or preventing a change in control of our company or other corporate action and could adversely affect the market price of our common shares and the voting and other rights of the holders of our common shares.

Upon closing of this offering, no new preferred shares will be outstanding, and we have no present plan to issue any new preferred shares.

Subscription Rights

We entered into a research funding agreement with Genome BC, which provides Genome BC with certain subscription rights upon certain funding payments. As of June 30, 2014, 51,810 common shares were issuable pursuant to these subscription rights, which rights will automatically convert into common shares immediately prior to the closing of this offering for no additional consideration.

Registration Rights

Under our amended and restated investor rights agreement, as amended, the holders of approximately 30,786,296 common shares or their transferees, have the right to require us to register the offer and sale of their common shares, or to include their common shares in any registration statement we file, in each case as described below. In connection with the current offering,   % of shareholders with registration rights have agreed not to sell or otherwise dispose of any securities without the prior written consent of the representatives of underwriters for a period of 180 days after the date of this prospectus, subject to certain terms and conditions. For more information regarding such terms and conditions, see “Shares Eligible for Future Sale—Lock-Up and Market Stand-off Agreements” and “Underwriting.”

Demand Registration Rights

The holders of a majority of the shares having registration rights have the right to demand that we file a registration statement for the offer and sale of at least such number of common shares, or a lesser amount if the anticipated offering proceeds would exceed CAD$5,000,000, or $4,701,000, as converted, subject to specified limitations. We are only obligated to effect two registrations in connection with the exercise of demand registration rights. These registration rights are subject to specified conditions and limitations, including the right of the underwriters to limit the number of common shares included in any such registration under certain circumstances and our ability to defer the filing of a registration statement with respect to an exercise of such demand registration rights for up to 90 days under certain circumstances.

Form S-3 Registration Rights

At any time after we are qualified to file a registration statement on Form S-3, each holder of shares having registration rights has the right to demand that we file a registration statement on Form S-3 so long as the aggregate amount of shares to be offered and sold under such registration statement on Form S-3 is at least CAD$500,000, or $470,100 as converted. We are not obligated to file any registration statements within 180 days following the effective date of a registration pertaining to a public offering or to effect more than two registrations on Form S-3 in any 12-month period. These registration rights are subject to specified conditions and limitations, including our ability to defer the filing of a registration statement with respect to an exercise of such Form S-3 registration rights for up to 90 days under certain circumstances.

Piggyback Registration Rights

If we propose to register the offer and sale of any of our securities under the Securities Act either for our own account or for the account of other shareholders, a shareholder with registration rights will have the right, subject to certain exceptions, to include their common shares in the registration statement. These registration rights are subject to specified conditions and limitations, including the right of the underwriters to limit the number of common shares included in any such registration statement under certain circumstances, but not below 25% of the total number of common shares covered by the registration statement.

Expenses of Registration

We will pay all expenses relating to any demand registrations, Form S-3 registrations and piggyback registrations, other than underwriting discounts and selling commissions.

Termination

The registration rights terminate upon the earliest of (1) the date that is four years after the closing of this offering and (2) as to a given holder of registration rights, if (a) we have completed our initial public offering and are subject to the public company reporting requirements of the Securities Exchange Act of 1934, (b) such holder holds less than 1% of our outstanding common shares and (c) such holder can sell all of such holder’s registrable securities in a three month-period pursuant to Rule 144 promulgated under the Securities Act.

Right of First Refusal

Under our amended and restated investors rights agreement, as amended, certain holders of our redeemable convertible preferred shares have rights of first refusal to purchase their pro rata share of equity securities that we may issue from time to time, with certain exceptions. Such rights of first refusal do not apply to the shares to be issued in this offering. On the effective date of a registration statement for an initial public offering completed on or before December 31, 2014 that results in our common shares being quoted on NASDAQ, these rights of first refusal will terminate.

Corporate Governance

Under the CBCA, we are required to hold a general meeting of our shareholders at least once every year at a time and place determined by our board of directors, provided that the meeting must not be held later than 15 months after the preceding annual general meeting and no later than six months after the end of the preceding financial year. The CBCA requires that meetings of shareholders shall be held at any place within Canada as our board of directors may from time to time determine. A notice to convene a meeting, specifying the date, time and location of the meeting must be sent to shareholders, to each director and the auditor not less than 21 days prior to the meeting or such other minimum period as required by the applicable securities laws. Under the CBCA, shareholders entitled to notice of a meeting may waive or reduce the period of notice for that meeting, provided applicable securities laws requirements are met.

Under the CBCA, all business transacted at a special meeting of shareholders and all business transacted at an annual meeting of shareholders, except consideration of the financial statements, auditor's report, election of directors and re-appointment of the incumbent auditor, is deemed to be special business. Notice of a meeting of shareholders at which special business is to be transacted shall state (a) the nature of that business in sufficient detail to permit the shareholder to form a reasoned judgment thereon; and (b) the text of any special resolution to be submitted to the meeting.

Under the CBCA, our board of directors has the power at any time to call a special meeting of our shareholders. In addition, the holders of not less than 5% of our shares that carry the right to vote at a meeting sought to be held can also requisition our board of directors to call a meeting of our shareholders for the purposes stated in the requisition. If our board of directors does not call the meeting within 21 days after receiving the requisition, our shareholders can call the meeting and the expenses reasonably incurred by such shareholders in requisitioning, calling and holding the meeting must be reimbursed by us.

Those entitled to vote at a meeting are entitled to attend meetings of our shareholders. Every shareholder entitled to vote may appoint a proxyholder to attend the meeting in the manner and to the extent authorized and with the authority conferred by the proxy. Directors, auditors, legal counsels, secretary (if any), and any other persons invited by the chair of the meeting or with the consent of those at the meeting are entitled to attend any meeting of our shareholders but will not be counted in quorum or be entitled to vote at the meeting unless he or she or it is a shareholder or proxyholder entitled to vote at the meeting.

Certain Takeover Bid Requirements

Unless such offer constitutes an exempt transaction, an offer made by a person, an "offeror", to acquire outstanding shares of a Canadian entity that, when aggregated with the offeror's holdings (and those of persons or companies acting jointly with the offeror), would constitute 20% or more of the outstanding shares in a class, would be subject to the take-over provisions of Canadian securities laws. The foregoing is a limited and general summary of certain aspects of applicable securities law in the provinces and territories of Canada, all in effect as of the date hereof.

In addition to those takeover bid requirements noted above, the acquisition of our shares may trigger the application of statutory regimes including among others, the Investment Canada Act (Canada) and the Competition Act (Canada).

Limitations on the ability to acquire and hold our common shares may be imposed by the Competition Act (Canada). This legislation permits the Commissioner of Competition, or the Commissioner, to review any acquisition of control over or of a significant interest in us. This legislation grants the Commissioner jurisdiction, for up to one year, to challenge this type of acquisition before the Canadian Competition Tribunal on the basis that it would, or would be likely to, substantially prevent or lessen competition in any market in Canada.

This legislation also requires any person who intends to acquire our common shares to file a notification with the Canadian Competition Bureau if certain financial thresholds are exceeded and if that person (and their affiliates) would hold more than 20% of our common shares. If a person already owns 20% or more of our common shares, a notification must be filed when the acquisition of additional shares would bring that person's holdings to over 50%. Where a notification is required, the legislation prohibits completion of the acquisition until the expiration of a statutory waiting period, unless the Commissioner provides written notice that she does not intend to challenge the acquisition.

There is no limitation imposed by Canadian law or our articles on the right of non-residents to hold or vote our common shares, other than those imposed by the Investment Canada Act.

The Investment Canada Act requires any person that is a "non-Canadian" (as defined in the Investment Canada Act) who acquires control of an existing Canadian business, where the acquisition of control is not a reviewable transaction, to file a notification with Industry Canada. The Investment Canada Act generally prohibits the implementation of a reviewable transaction unless, after review, the relevant minister is satisfied that the investment is likely to be of net benefit to Canada. Under the Investment Canada Act, the acquisition of control of us (either through the acquisition of our common shares or all or substantially all our assets) by a non-Canadian who is a World Trade Organization member country investor, including a U.S. investor, would be reviewable only if the value of our assets was equal to or greater than a specified amount. The specified amount for 2014 is CAD$354.0 million. The threshold amount is subject to an annual adjustment on the basis of a prescribed formula in the Investment Canada Act to reflect changes in Canadian gross domestic product.

As a result of recent amendments to the Investment Canada Act substantial changes to the review threshold are pending. If and when these amendments come into force, the review threshold will increase to CAD$600.0 million (and eventually to CAD$1.0 billion) and will no longer be calculated on the basis of the book value of the Canadian business assets, but rather its “enterprise value”.

The acquisition of a majority of the voting interests of an entity is deemed to be acquisition of control of that entity. The acquisition of less than a majority but one-third or more of the voting shares of a corporation or an equivalent undivided ownership interest in the voting shares of a corporation is presumed to be an acquisition of control of that corporation unless it can be established that, on the acquisition, the corporation is not controlled in fact by the acquirer through the ownership of voting shares. The acquisition of less than one-third of the voting shares of a corporation is deemed not to be an acquisition of control of that corporation. Certain transactions in relation to our common shares would be exempt from review by the Investment Canada Act including:

- the acquisition of our common shares by a person in the ordinary course of that person’s business as a trader or dealer in securities;
- the acquisition of control of us in connection with the realization of security granted for a loan or other financial assistance and not for any purpose related to the provisions of the Investment Canada Act; and
- the acquisition of control of us by reason of an amalgamation, merger, consolidation or corporate reorganization following which ultimate direct or indirect control in fact of us, through the ownership of our voting shares, remains unchanged.

Under the new national security regime in the Investment Canada Act, review on a discretionary basis may also be undertaken by the federal government in respect of a much broader range of investments by a non-Canadian to “acquire, in whole or in part, or to establish an entity carrying on all or any part of its operations in Canada.” The relevant test is whether such an investment by a non-Canadian could be “injurious to national security.” The Minister of Industry has broad discretion to determine whether an investor is a non-Canadian and may be subject to national security review. Review on national security grounds is at the discretion of the federal government and may occur on a pre- or post-closing basis.

There is no law, governmental decree or regulation in Canada that restricts the export or import of capital or which would affect the remittance of dividends or other payments by us to non-Canadian holders of our common shares or preferred shares, other than withholding tax requirements.

Neither our articles nor by-laws contain any change of control limitations with respect to a merger, acquisition or corporate restructuring that involves us.

This summary is not a comprehensive description of relevant or applicable considerations regarding such requirements and, accordingly, is not intended to be, and should not be interpreted as, legal advice to any prospective purchaser and no representation with respect to such requirements to any prospective purchaser is made. Prospective investors should consult their own Canadian legal advisors with respect to any questions regarding securities law in the provinces and territories of Canada.

Actions Requiring a Special Majority

Under the CBCA, certain corporate actions require the approval of a special majority of shareholders, meaning holders of shares representing not less than 66 $^{2}/_{3}$% of those votes cast in respect of a shareholder vote addressing such matter. Those items requiring the approval of a special majority generally relate to fundamental changes with respect to our business, and include among others, resolutions: (i) amending our articles; (ii) approving an amalgamation; (iii) approving a continuance; and (iv) providing for a sale, lease or exchange of all or substantially all of our property.

Advance Notice Procedures and Shareholder Proposals

Under the CBCA, shareholders may make proposals for matters to be considered at the annual general meeting of shareholders. Such proposals must be sent to us in advance of any proposed meeting by delivering a timely written notice in proper form to our registered office in accordance with the requirements of the CBCA. The notice must include information on the business the shareholder intends to bring before the meeting.

In addition, our amended by-laws that will be in effect upon the closing of this offering, require that shareholders provide us with advance notice of their intention to nominate any persons, other than those nominated by management, for election to our board of directors at a meeting of shareholders.

These provisions could have the effect of delaying until the next shareholder meeting shareholder actions that are favored by the holders of a majority of our outstanding voting securities.

Ownership and Exchange Controls

There is currently no law, governmental decree or regulation in Canada that restricts the export or import of capital, or which would affect the remittance of dividends, interest or other payments by us to non-resident holders of our common shares, other than withholding tax requirements, as discussed below under "United States and Canadian Income Tax Considerations—Certain Canadian Federal Income Tax Information."

There is currently no limitation imposed by Canadian law or our amended articles or by-laws on the right of non-residents to hold or vote our common shares, other than those imposed by the Investment Canada Act and the Competition Act (Canada). These acts will generally not apply except where a control of an existing Canadian business or company, which has Canadian assets or revenue over a certain threshold, is acquired and will not apply to trading generally of securities listed on a stock exchange.

Listing

We intend to apply to have our common shares approved for listing on The NASDAQ Global Market under the symbol "XENE."

Transfer Agent and Registrar

The transfer agent and registrar for our common shares is   . The transfer agent and registrar's address is   .

MATERIAL DIFFERENCES BETWEEN THE CANADA BUSINESS CORPORATIONS ACT AND THE DELAWARE GENERAL CORPORATION LAW

Our corporate affairs are governed by our articles of continuance and by-laws and the provisions of the Canada Business Corporations Act, or CBCA. The CBCA differs from the various state laws applicable to U.S. corporations and their shareholders. The following table provides a summary of the material differences between the provisions of the CBCA and the Delaware General Corporation Law, or DGCL, taking into account certain specific provisions in our amended articles and our by-laws that will be in effect upon the closing of this offering.

	CBCA	DGCL
Authorized share capital	Upon closing, under our amended articles, as permitted by the CBCA, the authorized share capital will consist of (i) an unlimited number of common shares without par value and (ii) an unlimited number of new preferred shares without par value, issuable in series. Upon closing, under our amended articles, our board of directors will have the authority to issue new preferred shares in one or more series, with such designations and special rights and restrictions as our board of directors may determine.	Under the DGCL, a corporation's certificate of incorporation must specify the number of shares of each class of stock and their par value, or include a statement that such shares are without par value. The certificate of incorporation must also set forth the designations, powers, preferences, rights, qualifications, limitations and restrictions of each class of shares, if any. Under the DGCL, a corporation's certificate of incorporation may give the board of directors the authority to issue preferred stock in one or more series, with such designations and special rights and restrictions as determined by the board of directors.
Dividends	Under the CBCA and our amended articles, dividends may be declared on the common shares at the discretion of our board of directors. Any dividends declared shall be subject to the rights, if any, of shareholders holding shares with special rights as to dividends. Our directors may declare dividends unless there are reasonable grounds for believing that we are insolvent or the payment of such dividends would render us insolvent.	The DGCL generally provides that, subject to certain restrictions, the directors of a corporation may declare and pay dividends upon the shares of its capital stock either out of the corporation's surplus or, if there is no such surplus, out of its net profits for the fiscal year in which the dividend is declared and/or the preceding fiscal year. Further, the holders of preferred or special stock of any class or series may be entitled to receive dividends at such rates, on such conditions and at such times as stated in the certificate of incorporation.
Vote Required for Certain Transactions	Under the CBCA, certain extraordinary corporate actions, including, without limitation, continuances, certain amalgamations and sales, leases or exchanges of all, or substantially all, of the property of a corporation (other than in the ordinary course of business), and liquidations, dissolutions and certain arrangements, are required to be approved by special resolution of our shareholders. A special resolution is a resolution passed by not less than two-thirds of the votes cast by the shareholders who voted in respect of the resolution or signed by all shareholders entitled to vote on the resolution.	Under the DGCL, certain mergers, consolidation, sale, lease, exchange or other disposition of all, or substantially all, the property and assets of a corporation or dissolution of the corporation requires the approval of a majority of the outstanding voting stock of the corporation entitled to vote thereon.

Amendment of Organizing Documents	Under the CBCA, an amendment to our articles generally requires approval by special resolution of holders of our voting shares. Specified amendments may also require the approval of other classes of our shares. In the event that an amendment to our articles would prejudice or interfere with a right or special right attached to our issued shares of a class or series of our shares, such amendment must be approved separately by the holders of the class or series of shares being affected.	The DGCL provides that a corporation may amend its certificate of incorporation if its board of directors has adopted such amendment, followed by the affirmative vote of a majority of the outstanding voting stock and a majority of the outstanding shares of each class entitled to vote on the amendment as a class. In the event the amendment would alter the aggregate number of authorized shares of a class of stock, their par value, or the powers, preferences or special rights of the shares of a class so as to affect them adversely, the holders of the outstanding shares of the class are entitled to vote as a class upon a proposed amendment, whether or not entitled to vote thereon by the certificate of incorporation.
Amendment of By-laws	Under the CBCA, our board of directors may, by resolution, make, amend or repeal any by-law that regulates our business or affairs. Where our board of directors makes, amends or repeals a by-law, they are required under the CBCA to submit that action to our shareholders at the next meeting of shareholders and our shareholders may confirm, reject or amend that action by ordinary resolution. If the action is rejected by our shareholders, or our board of directors does not submit the action to our shareholders at the next meeting of shareholders, the action will cease to be effective and no subsequent resolution of our directors to make, amend or repeal a by-law having substantially the same purpose or effect will be effective until it is confirmed.	The DGCL provides that the stockholders entitled to vote have the power to adopt, amend or repeal bylaws. A corporation may also confer, in its certificate of incorporation, that power upon the board of directors.
Quorum of Shareholders	As permitted under the CBCA, our by-laws provide that quorum for meetings of shareholders is one person present or representing by proxy, shareholders holding no less than 33 $^{1}/_{3}$% of the issued shares entitled to be voted at the meeting.	Under the DGCL, unless otherwise provided in the certificate of incorporation, with respect to any matter, a quorum for a meeting of stockholders requires the holders of a majority of the shares entitled to vote are represented at the meeting in person or by proxy.
Annual Meetings of Shareholders	Under the CBCA, we must hold an annual general meeting of our shareholders at least once every year at a time and place determined by our board of directors, provided that the meeting must not be held later than 15 months after the preceding annual general meeting but no later than six months after the end of our preceding financial year. The CBCA requires that a meeting of our shareholders may be held anywhere in Canada as our board of directors may determine. Under the CBCA, and our by-laws, we must provide notice of an annual general meeting to each shareholder entitled to vote thereat, to each director, and to our auditor at least 21 days in advance of the meeting.	Under the DGCL, a corporation must hold an annual meeting of stockholders in a place designated by the certificate of incorporation or bylaws, whether inside or outside of Delaware, or, if not so designated, as determined by the board of directors and on a date and at a time designated in the bylaws, except as otherwise provided by law. Written notice of every meeting of stockholders must be given to each stockholder of record not less than 10 not more than 60 days before the date of the meeting.

Special Meetings of Shareholders	Under the CBCA and our by-laws, our board of directors has the power at any time to call a special meeting of shareholders. Under the CBCA, the holders of not less than 5% of our issued shares that carry the right to vote at a meeting sought to be held can also requisition our directors to call a meeting of shareholders for the purposes stated in the requisition.	Under the DGCL, special meetings of stockholders may be called by the board of directors or by such person or persons as may be authorized by the certificate of incorporation or the bylaws.
Anti-takeover Provisions and Interested Shareholder Transactions	As permitted by the CBCA, our amended articles provide that our board of directors may fix the number of preferred shares in, and determine the designation of the shares of, each series and create, define and attach rights and restrictions to the preferred shares without shareholder approval. Neither the CBCA nor our amended articles restrict us from adopting a shareholder rights plan. The CBCA does not restrict related party transactions; however, in Canada takeovers and other related party transactions are addressed in provincial securities legislation and policies which may apply to us.	Under the DGCL, a certificate of incorporation may provide the board of directors with the ability to designate the terms of and issue a new class or series of preferred stock, and to issue a stockholder rights plan. Delaware corporations are subject to Delaware's "business combination" statute. In general, such statute prohibits a corporation from engaging in any business combination transactions with an interested stockholder for a period of three years after the time that the stockholder became an interested stockholder, unless approved by the board of directors beforehand or upon satisfaction of other criteria.
Interested Director Transactions	Under the CBCA, a director who holds a disclosable interest in a material contract or transaction into which we have entered or propose to enter may generally not vote on any directors' resolution to approve the contract or transaction. A director or officer has a disclosable interest in a material contract or transaction if the director or officer is: n a party to the contract or transaction; n is a director or officer, or an individual acting in a similar capacity, of a party to the contract or transaction; or n has a material interest in a party to the contract or transaction. Under the CBCA, directors do not have to abstain from voting on matters related to director compensation.	Under the DGCL, a transaction in which a director of the corporation has a conflict of interest is not void or voidable solely because of the director's conflict, solely because the director is present at or participates in the meeting of the board of directors or committee which authorizes the transaction or solely because any such director's vote is counted for such purpose, if (a) the material facts of the conflict of interest are known to or disclosed to the board of directors or the committee and the board of directors or committee in good faith authorizes the transaction by a majority of the votes of the disinterested directors, (b) the material facts of the conflict of interest are known or disclosed to the stockholders of the corporation and the transaction is approved in good faith by the stockholders, or (c) the board of directors can demonstrate that the transaction is fair as to the corporation as of the time it is approved by the board of directors, committee or stockholders.
Directors' and Officers'; Liability and Indemnification	As permitted under the CBCA, our by-laws, subject to certain limitations, require us to indemnify our directors and officers and our former directors and officers and any persons acting, at our request, as a director or officer, or in a similar capacity, of a body corporate.	Under the DGCL, a corporation has the power to indemnify any person who was, is or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, or any person who was, is or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to

		procure a judgment in its favor, in each case by reason of the fact that the person is or was a director, officer, employee or agent of the corporation, against expenses, judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with such action, suit or proceeding if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interest of the corporation, and subject to certain other limitations.
Dissent or Dissenters' Appraisal Rights	Under the CBCA dissenters' rights are generally only available in connection with: n any amalgamation with another corporation (other than with certain affiliated corporations); n an amendment to our articles to add, change or remove any provisions restricting or constraining the issue or transfer of shares of the class in respect of which a shareholder is dissenting; n an amendment to our articles to add, change or remove any restriction upon the business or businesses that we may carry on; n a continuance under the laws of another jurisdiction; n a sale, lease or exchange of all, or substantially all, of our property other than in the ordinary course of business; n the carrying out of a going-private or a squeeze-out transaction; n a court order permitting a shareholder to dissent in connection with an application to the court for an order approving an arrangement proposed by us; and n certain amendments to our articles which require a separate class or series vote by a holder of shares of any class or series.	Under the DGCL, dissenters' rights are generally only available in connection with cash mergers or mergers where the target stockholders hold stock other than stock of a widely held corporation.
Oppression Remedy	The CBCA provides an oppression remedy that enables a court to make any order, whether interim or final, to rectify matters that are oppressive or unfairly prejudicial to or that unfairly disregard the interests of any of our securityholders, creditors, directors or officers if an application is made to a court by a "complainant".	The DGCL does not expressly provide for a similar remedy.

<table>
<tr><td></td><td>A “complainant” with respect to a corporation means any of the following:
• a present or former registered holder or beneficial owner of securities of the corporation or any of its affiliates;
• a present or former officer or director of the corporation or any of its affiliates;
• the director responsible for the application of the CBCA; and
• any other person who in the discretion of the court is a proper person to make the application.

The oppression remedy provides the court with very broad and flexible powers to intervene in corporate affairs to protect our shareholders and other complainants. While conduct that is in breach of fiduciary duties of directors or that is contrary to the legal right of a complainant will normally trigger the court’s jurisdiction under the oppression remedy, the exercise of that jurisdiction does not depend on a finding of a breach of those legal and equitable rights.</td><td></td></tr>
<tr><td>Shareholder Derivative Actions</td><td>Under the CBCA, a complainant may also apply to a Canadian court for leave to bring an action in the name of, and on behalf of us, or to intervene in an existing action to which we are a party, for the purpose of prosecuting, defending or discontinuing an action on our behalf. Under the CBCA, no action may be brought and no intervention in an action may be made unless a court is satisfied that:
• the complainant has given the required notice to our board of directors of the shareholder’s intention to apply to the court if our board of directors does not bring, diligently prosecute or defend or discontinue the action;
• the complainant is acting in good faith; and
• it appears to be in our interests or the interest of the relevant subsidiary that the action be brought, prosecuted, defended or discontinued.

Under the CBCA, the court in a derivative action may make any order it thinks fit.</td><td>Under the DGCL, stockholders may bring derivative actions on behalf of, and for the benefit of, the corporation. The plaintiff in a derivative action on behalf of the corporation either must be or have been a stockholder of the corporation at the time of the transaction or must be a stockholder who became a stockholder by operation of law.</td></tr>
</table>

Director Qualification	Generally, at least 25% of the directors of a CBCA corporation must be resident Canadians. Furthermore, under the CBCA, no business may be transacted at a meeting of our board of directors unless 25% of the directors present, or able to provide approval of the business transacted at the meeting in writing, by telephone or other means of communication, are resident Canadians.	The DGCL does not have director residency requirements although a corporation may prescribe qualifications for directors under its certificate of incorporation or bylaws.

SHARES ELIGIBLE FOR FUTURE SALE

Prior to this offering, there has been no public market for our common shares, and although we expect that our common shares will be approved for listing on The NASDAQ Global Market, we cannot assure investors that there will be an active public market for our common shares following this offering. We cannot predict what effect, if any, sales of our shares in the public market or the availability of shares for sale will have on the market price of our common shares. Future sales of substantial amounts of common shares in the public market, including shares issued upon exercise of outstanding options, or the perception that such sales may occur, however, could adversely affect the market price of our common shares and also could adversely affect our future ability to raise capital through the sale of our common shares or other equity-related securities of ours at times and prices we believe appropriate.

Upon completion of this offering, based on our shares outstanding as of June 30, 2014 and after giving effect to the conversion of all outstanding convertible preferred shares and the conversion of all subscription rights, of our common shares will be outstanding, or common shares if the underwriters exercise their option to purchase additional common shares in full. All of the common shares expected to be sold in this offering will be freely tradable without restriction or further registration under the Securities Act of 1933, as amended, or the Securities Act, unless held by our "affiliates," as that term is defined in Rule 144 under the Securities Act. The remaining outstanding common shares will be deemed "restricted securities" as that term is defined under Rule 144. Restricted securities may be sold in the public market only if their offer and sale is registered under the Securities Act or if the offer and sale of those securities qualify for an exemption from registration, including exemptions provided by Rules 144 and 701 under the Securities Act, which are summarized below.

As a result of the lock-up agreements and market stand-off provisions described below and the provisions of Rules 144 or 701 and no exercise of the underwriters' option to purchase additional common shares, the common shares that will be deemed "restricted securities" will be available for sale in the public market following the completion of this offering as follows:

- shares will be eligible for sale on the date of this prospectus; and
- shares will be eligible for sale upon expiration of the lock-up agreements and market stand-off provisions described below, beginning more than 180 days after the date of this prospectus.

We may issue common shares from time to time for a variety of corporate purposes, including in capital-raising activities through future public offerings or private placements, in connection with exercise of stock options, vesting of restricted stock units and other issuances relating to our employee benefit plans and as consideration for future acquisitions, investments or other purposes. The number of common shares that we may issue may be significant, depending on the events surrounding such issuances. In some cases, the shares we issue may be freely tradable without restriction or further registration under the Securities Act; in other cases, we may grant registration rights covering the shares issued in connection with these issuances, in which case the holders of the common shares will have the right, under certain circumstances, to cause us to register any resale of such shares to the public.

Lock-Up and Market Standoff Agreements

We, our directors and officers and substantially all of the holders of our equity securities have agreed, subject to certain exceptions, not to offer, sell or transfer any of our common shares or securities convertible into or exchangeable or exercisable for our common shares, for 180 days after the date of this prospectus without first obtaining the written consent of Jefferies LLC and Cowen and Company, LLC on behalf of the underwriters, after the date of this prospectus. These agreements are described in the section of this prospectus captioned "Underwriting."

Jefferies LLC and Cowen and Company, LLC have advised us that they have no present intent or arrangement to release any common shares subject to a lock-up, and will consider the release of any lock-up on a case-by-case basis. There are no existing agreements between the underwriters and any of our shareholders who have or will execute a lock-up agreement, providing consent to the sale of common shares prior to the expiration of the lock-up period.

Following the lock-up periods set forth in the agreements described above, and assuming that the representatives of the underwriters do not release any parties from these agreements and that there is no extension of the lock-up period, all of the common shares that are restricted securities or are held by our affiliates as of the date of this prospectus will be eligible for sale in the public market in compliance with Rule 144 under the Securities Act.

In addition to the restrictions contained in the lock-up agreements described above, our amended and restated investor rights agreement, as amended, contains market stand-off provisions imposing restrictions on the ability of certain of our security holders to offer, sell or transfer our equity securities for a period of 180 days following the effective date of this registration statement.

Rule 144

In general, under Rule 144, as currently in effect, once we have been subject to the public company reporting requirements of the Securities Exchange Act of 1934, as amended, or the Exchange Act, for at least 90 days, a person (or persons whose common shares are required to be aggregated) who is not deemed to have been one of our "affiliates" for purposes of Rule 144 at any time during the three months preceding a sale, and who has beneficially owned restricted securities within the meaning of Rule 144 for at least six months, including the holding period of any prior owner other than one of our "affiliates," is entitled to sell those shares in the public market (subject to the lock-up agreement referred to above, if applicable) without complying with the manner of sale, volume limitations or notice provisions of Rule 144, but subject to compliance with the public information requirements of Rule 144. If such a person has beneficially owned the shares proposed to be sold for at least one year, including the holding period of any prior owner other than "affiliates," then such person is entitled to sell such shares in the public market without complying with any of the requirements of Rule 144 (subject to the lock-up agreement referred to above, if applicable). In general, under Rule 144, as currently in effect, once we have been subject to the public company reporting requirements of the Exchange Act for at least 90 days, our "affiliates," as defined in Rule 144, who have beneficially owned the common shares proposed to be sold for at least six months are entitled to sell in the public market, upon expiration of any applicable lock-up agreements and within any three-month period, a number of those common shares that does not exceed the greater of:

- 1% of the number of common shares then outstanding, which will equal approximately common shares immediately after this offering (calculated on the basis of the assumptions described above and assuming no exercise of the underwriter's option to purchase additional shares and no exercise of outstanding options or warrants); or
- the average weekly trading volume of our common shares on The NASDAQ Global Market during the four calendar weeks preceding the filing of a notice on Form 144 with respect to such sale.

Such sales under Rule 144 by our "affiliates" or persons selling shares on behalf of our "affiliates" are also subject to certain manner of sale provisions, notice requirements and to the availability of current public information about us. Notwithstanding the availability of Rule 144, the holders of substantially all of our restricted securities have entered into lock-up agreements as referenced above and their restricted securities will become eligible for sale (subject to the above limitations under Rule 144) upon the expiration of the restrictions set forth in those agreements.

Rule 701

In general, under Rule 701 as currently in effect, any of our employees, directors, officers, consultants or advisors who acquired common shares from us in connection with a written compensatory stock or option plan or other written agreement in compliance with Rule 701 under the Securities Act before the effective date of the registration statement of which this prospectus is a part (to the extent such common shares are not subject to a lock-up agreement) is entitled to rely on Rule 701 to resell such common shares beginning 90 days after we become subject to the public company reporting requirements of the Exchange Act in reliance on Rule 144, but without compliance with the holding period requirements contained in Rule 144. Accordingly, subject to any applicable lock-up agreements, beginning 90 days after we become subject to the public company reporting requirements of the Exchange Act, under Rule 701 persons who are not our "affiliates," as defined in Rule 144, may resell those common shares without complying with the minimum holding period or public information requirements of Rule 144, and persons who are our "affiliates" may resell those common shares without compliance with Rule 144's minimum holding period requirements (subject to the terms of the lock-up agreement referred to above, if applicable).

Equity Incentive Plans

We intend to file with the SEC a registration statement under the Securities Act covering the common shares that we may issue upon exercise of outstanding options under our Amended and Restated Stock Plan and the common shares that we may issue pursuant to future awards under our 2014 Equity Incentive Plan. Such registration statement is expected to be filed and become effective as soon as practicable after the completion of this offering. Accordingly, common shares registered under such registration statement will be available for sale in the open market following its effective date, subject to Rule 144 volume limitations and the lock-up agreements described above, if applicable.

Registration Rights

Upon completion of this offering, the holders of approximately 30,786,296 of our common shares will be eligible to exercise certain rights to cause us to register their common shares for resale under the Securities Act, subject to various conditions and limitations. These registration rights are described under the caption “Description of Share Capital— Registration Rights.” Upon the effectiveness of a registration statement covering these common shares, the common shares would become freely tradable, and a large number of common shares may be sold into the public market. If that occurs, the market price of our common shares could be adversely affected.

UNITED STATES AND CANADIAN INCOME TAX CONSIDERATIONS

U.S. Federal Income Tax Information for U.S. Holders

The following summary describes the material U.S. federal income tax consequences of the ownership and disposition of common shares purchased in this offering. The discussion set forth below is applicable to U.S. Holders (as defined below). This summary deals only with common shares held as capital assets, meaning generally, assets held for investment.

The term "U.S. Holder" means a beneficial owner of a common share that is, for U.S. federal income tax purposes:

- an individual citizen or resident of the U.S.;
- a corporation (or other entity treated as a corporation for U.S. federal income tax purposes) created or organized in or under the laws of the U.S., any state thereof or the District of Columbia;
- an estate, the income of which is subject to U.S. federal income taxation regardless of its source; or
- a trust if it (a) is subject to the primary supervision of a court within the U.S. and one or more U.S. persons have the authority to control all substantial decisions of the trust or (b) has a valid election in effect under applicable U.S. Treasury regulations to be treated as a U.S. person.

This summary does not describe all of the U.S. federal income tax consequences applicable to a U.S. Holder if such U.S. Holder is subject to special treatment under U.S. federal income tax laws, including if such U.S. Holder is:

- a dealer in securities or currencies;
- a financial institution;
- a regulated investment company;
- a real estate investment trust;
- an insurance company;
- a tax-exempt organization;
- a person holding our common shares as part of a hedging, integrated or conversion transaction, a constructive sale or a straddle;
- a trader in securities that has elected the mark-to-market method of accounting for its securities;
- a person liable for alternative minimum tax;
- a person who owns, directly, indirectly or constructively, or is deemed to own 10% or more of our voting common shares;
- a partnership or other pass-through entity for U.S. federal income tax purposes; or
- a person whose "functional currency" is not the U.S. dollar.

If a partnership holds our common shares, the tax treatment of a partner will generally depend upon the status of the partner and the activities of the partnership. Partners of a partnership holding our common shares should consult their own tax advisors.

The discussion below is based upon the provisions of the U.S. Internal Revenue Code of 1986, as amended, or the Code, and regulations, including proposed regulations, Internal Revenue Service, or the IRS, rulings and judicial decisions thereunder as of the date hereof. These authorities may be replaced, revoked or modified so as to result in U.S. federal income tax consequences different from those discussed below. This discussion does not contain a detailed description of all U.S. federal income tax consequences applicable to a U.S. Holder in light of such U.S. Holder's particular circumstances and does not address the effects of any state, local or non-U.S. tax laws.

If you are considering the purchase of our common shares, you should consult your own tax advisors concerning the U.S. federal income tax consequences to you in light of your particular situation as well as any consequences arising under the laws of any other taxing jurisdiction.

Taxation of Dividends

Subject to the discussion below under "Passive Foreign Investment Company Consequences," the gross amount of distributions on our common shares (including amounts withheld to pay Canadian withholding taxes) will be taxable as dividends to a U.S. Holder to the extent paid out of our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. Dividends paid on our common shares (including withheld taxes) will be includable in a U.S. Holder's gross income as dividend income when actually or constructively received. Such dividends will not be eligible for the dividends-received deduction generally allowed to corporations with respect to dividends received from U.S. corporations. Distributions treated as dividends that are received by non-corporate U.S. Holders are expected to qualify for the 20% reduced maximum tax rate available for dividends received from a "qualified foreign corporation" provided certain holding period and other requirements are met. However, if we are a Passive Foreign Investment Company, or PFIC, for the taxable year in which the dividends are paid or the preceding taxable year (see "Passive Foreign Investment Company Consequences" below), we will not be treated as a qualified foreign corporation, and therefore the reduced maximum tax rate described above will not apply. Non-corporate U.S. Holders that do not meet a minimum holding period requirement during which they are not protected from the risk of loss or that elect to treat the dividend income as "investment income" under applicable Code provisions will not be eligible for the reduced rates of taxation regardless of our status as a qualified foreign corporation. Further, the rate reduction will not apply to dividends if the recipient of a dividend is obligated to make related payments with respect to positions in substantially similar or related property. This disallowance applies even if the minimum holding period has been met.

Subject to certain conditions and limitations, Canadian tax withheld from dividends paid on our common shares (see "Canadian Federal Income Tax Information—Non-Residents of Canada—Dividends on the Common Shares") may be deducted by a U.S. Holder from adjusted gross income or claimed as a credit against the U.S. Holder's U.S. federal income tax. A U.S. Holder may claim a deduction for Canadian taxes withheld from dividends paid in a taxable year only if the U.S. Holder elects to deduct all foreign income taxes paid in that taxable year. A foreign tax credit may only be claimed against U.S. federal income tax on foreign source income subject to the foreign tax credit limitation. The credit is calculated separately with respect to different categories of income. Dividends paid on our common shares will generally constitute foreign source "passive category income" for foreign tax credit purposes. A special rule will apply if we are a "United States-owned foreign corporation." In that case, dividends paid in a taxable year will be treated as dividends from U.S. sources and foreign sources in proportion to our earnings and profits for the taxable year from U.S. sources and from foreign sources. A U.S. Holder who is eligible to claim benefits under the Treaty however, may treat the entire dividend as one from foreign sources for the purpose of claiming a credit for any Canadian withholding tax deducted from the dividend if the U.S. Holder files the appropriate election on its U.S. federal tax return. We will be treated as a U.S.-owned foreign corporation as long as shares representing 50% or more of the voting power or value of our common shares is owned, directly or indirectly, by U.S. persons. The rules relating to the determination of foreign source income and the foreign tax credit are complex, and availability of a foreign tax credit depends on numerous factors. Each U.S. Holder should consult with its own tax advisor to determine whether its income with respect to our common shares would be foreign source income and whether and to what extent that U.S. Holder would be entitled to the foreign tax credit.

To the extent that the amount of any distribution exceeds our current and accumulated earnings and profits for a taxable year, as determined under U.S. federal income tax principles, the distribution will first be treated as a tax-free return of capital, causing a reduction in the adjusted basis of the common shares (thereby increasing the amount of gain, or decreasing the amount of loss, to be recognized on a subsequent disposition of the common shares), and the balance in excess of adjusted basis will be taxed as capital gain recognized on a sale or exchange. However, we cannot provide any assurance that we will maintain or provide earnings and profits determinations in accordance with U.S. federal income tax principles. Therefore, U.S. Holders should expect that a distribution will generally be treated as a dividend (as discussed above) even if that distribution would otherwise be treated as a non-taxable return of capital or as capital gain under the rules described above.

If a distribution is paid in Canadian dollars, the U.S. dollar value of such distribution on the date of receipt is used to determine the amount of the distribution received by a U.S. Holders. A U.S. Holder who continues to hold such Canadian dollars after the date on which they are received may recognize gain or loss upon their disposition due to exchange rate fluctuations. Generally, such gains and losses will be ordinary income or loss from U.S. sources.

Taxation of Capital Gains

Subject to the discussion below under “Passive Foreign Investment Company Consequences,” a U.S. Holder will recognize taxable gain or loss on the sale of our common shares equal to the difference between the amount realized for the common shares and the U.S. Holder’s tax basis in the common shares. Such gain or loss will be capital gain or loss. Capital gains of non-corporate U.S. Holders, including individual U.S. Holders, derived with respect to capital assets held for more than one year are eligible for reduced rates of taxation. The deductibility of capital losses is subject to limitations. Any gain or loss recognized by a U.S. Holder will generally be U.S. source gain or loss for foreign tax credit limitation purposes.

Passive Foreign Investment Company Consequences

In general, a corporation organized outside the U.S. will be treated as a PFIC in any taxable year in which either (i) at least 75% of its gross income is “passive income” or (ii) on average at least 50% of its assets is attributable to assets that produce passive income or are held for the production of passive income. Passive income for this purpose generally includes, among other things, dividends, interest, royalties, rents, and gains from commodities and currency transactions and from the sale or exchange of property that gives rise to passive income. Assets that produce or are held for the production of passive income include cash, even if held as working capital or raised in a public offering, marketable securities and other assets that may produce passive income. The average percentage of a corporation’s assets that produce or are held for the production of passive income generally is determined on the basis of the fair market value of the corporation’s assets at the end of each quarter. In determining whether a foreign corporation is a PFIC, a proportionate share of the income and assets of each corporation in which it owns, directly or indirectly, at least a 25% interest (by value) is taken into account.

Based on the nature of our business, the projected composition of our income and estimated fair market value of our assets, we do not believe that we were characterized as a PFIC in 2013 and we do not expect to be a PFIC in 2014, although we could be a PFIC in one or more subsequent years. Our status as a PFIC is a fact-intensive determination made on an annual basis and we cannot provide any assurance regarding our PFIC status for the future taxable years. Neither our U.S. counsel nor U.S. tax advisor expresses any opinion with respect to our PFIC status or with respect to our expectations regarding our PFIC status.

If we are a PFIC in any taxable year during which a U.S. Holder owns our common shares, such U.S. Holder would be subject to taxation under the rules related to “excess distributions.” Under such rules, additional taxes and interest charges would apply to certain distributions by us or to gain upon dispositions of our shares if a U.S. Holder has not elected to have his or her investment in our common shares treated as an investment in a “qualified electing fund” or has not made a “mark-to-market election.” If we are a PFIC, all the gains recognized on disposition of our common shares would be treated as an excess distribution. In the case of an actual distribution, such distribution from us would be treated as an excess distribution only to the extent the total of actual distributions during a taxable year received by the U.S. Holder exceeds 125% of the average of actual distributions received in the three preceding taxable years, or, if shorter, the U.S. Holder’s holding period for our common shares. In these circumstances, the tax and interest charges will be determined by allocating such distributions ratably over the U.S. Holder’s holding period for the common shares. The amount allocated to the current taxable year (i.e. the year in which the gain is recognized or the distribution occurs) and any year prior to the first taxable year in which we are a PFIC would be taxed as ordinary income earned in the current taxable year, and the amount allocated to each of the other years in the holding period would be subject to a special tax and interest charge.

The amount allocated to prior taxable years in which we are a PFIC will be taxed at the highest marginal rates in effect for individuals or corporations as applicable to ordinary income for each such taxable year, and an interest charge, generally applicable to underpayments of tax, will be added to the tax. If we are a PFIC at any time when a U.S. Holder holds our common shares, we will generally continue to be treated as a PFIC with respect to the U.S. Holder for all succeeding years during which the U.S. Holder holds our common shares even if we cease to meet the PFIC gross income test or asset test. However, if we cease to meet these tests, a U.S. Holder can avoid the continuing impact of the PFIC rules by making a special election (a “Purging Election”) to recognize gain in the manner described above as if our common shares had been sold on the last day of the last taxable year during which we were a PFIC. In addition, for a U.S. Holder making such an election, a new holding period would be deemed to begin for our common shares for purposes of the PFIC rules. After the Purging Election, the common shares with respect to which the Purging Election was made will not be treated as shares in a PFIC unless we subsequently become a PFIC.

The tax consequences that would apply if we were a PFIC would be different from those described above if a U.S. Holder were able to make a valid “qualified electing fund,” or QEF, election. For each year that we meet the PFIC gross income test or asset test, an electing U.S. Holder would be required to include in gross income, its pro rata share of our net ordinary income and net capital gains, if any, as determined under U.S. federal income tax principles. The U.S. Holder’s adjusted tax basis in our shares would be increased by the amount of such inclusions. An actual distribution to the U.S. Holder out of such income generally would not be treated as a dividend and would decrease the U.S. Holder’s adjusted tax basis in our shares. Gain realized from the sale of our shares covered by a QEF election would be taxed as a capital gain. Generally, a QEF election must be made by the U.S. Holder in a timely filed tax return for the first taxable year in which the U.S. Holder held our shares that includes the close of our taxable year for which we met the PFIC gross income test or asset test. A QEF election is made on IRS Form 8621. U.S. Holders will be eligible to make QEF elections only if we agree to provide U.S. Holders with the information they will need to comply with the QEF rules. If we are a PFIC in the current or a future tax year, we will provide U.S. Holders with the information that is necessary in order for them to make a QEF election and to report their common shares of ordinary earnings and net capital gains for each year for which we are a PFIC.

The tax consequences that would apply if we were a PFIC would also be different from those described above if a timely and valid “mark-to-market” election is made by a U.S. Holder of our common shares. An electing U.S. Holder generally would take into account as ordinary income for each year that we meet the PFIC gross income test or asset test, the excess of the fair market value of our common shares held at the end of the taxable year over the adjusted tax basis of such common shares. The U.S. Holder would also take into account, as an ordinary loss for each year that we meet the PFIC gross income test or asset test, the excess of the adjusted tax basis of such common shares over their fair market value at the end of the taxable year, but only to the extent of the aggregate of the amounts previously included in income as a result of the mark-to-market election. The U.S. Holder’s tax basis in our common shares would be adjusted to reflect any income or loss resulting from the mark-to-market election. Any gain from a sale, exchange or other disposition of the common shares in any taxable year in which we are a PFIC would be treated as ordinary income and any loss from such sale, exchange or other disposition would be treated first as ordinary loss to the extent of any net mark-to-market gains previously included in income and thereafter as capital loss. If, after having been a PFIC for one or more taxable years, we cease to be classified as a PFIC, the U.S. Holder would not be required to take into account any latent gain or loss in the manner described above and any realized gain or loss would be classified as a capital gain or loss. A mark-to-market election will not apply to our common shares for any taxable year during which we are not a PFIC, but it will remain in effect with respect to any subsequent taxable year in which we become a PFIC. Such election will not apply to any subsidiary that we own.

A mark-to-market election is available to a U.S. Holder only if the common shares are considered “marketable stock.” Generally, stock will be considered marketable stock if it is “regularly traded” on a “qualified exchange” within the meaning of applicable U.S. Treasury regulations. A class of stock is regularly traded during any calendar year during which such class of stock is traded, other than in de minimis quantities, on at least 15 days during each calendar quarter. We expect that our common shares will be marketable stock as long as they remain listed on NASDAQ and are regularly traded.

If we are a PFIC in any taxable year during which a U.S. Holder owns the common shares, such U.S. Holder may also suffer adverse tax consequences under the PFIC rules described above with respect to any lower-tier PFIC in which we have a direct or indirect equity interest.

Each U.S. Holder who is a shareholder of a PFIC must file an annual report containing certain information as the U.S. Treasury may require.

Net Investment Income Tax

Certain U.S. Holders who are individuals, estates or trusts will be subject to a 3.8% U.S. federal tax on all or a portion of their “net investment income,” which includes all or a portion of their dividends (or deemed dividends) on our common shares and net gains from the disposition of our common shares. U.S. Holders that are individuals, estates or trusts should consult their tax advisors regarding the applicability of the U.S. federal tax on net investment income to any of their income or gains in respect of our common shares.

Information Reporting and Backup Withholding

In general, information reporting will apply to dividends in respect of our common shares and the proceeds from the sale or disposition of our common shares that are paid to a U.S. Holder within the U.S. (and in certain cases, outside the U.S.), unless the U.S. Holder is an exempt recipient. Backup withholding may apply to such payments if the U.S. Holder fails to provide a taxpayer identification number or certification of other exempt status or if the U.S. Holder has previously failed to report in full dividend or interest income. If backup withholding applies to a payment, we or our paying agent will deduct the amount of any required withholding directly from such payment and remit it directly to the U.S. Treasury on behalf of the U.S. Holder. Backup withholding is not an additional tax. Any amounts withheld by us or our paying agent under the backup withholding rules will be allowed as a refund or a credit against the U.S. Holder's U.S. federal income tax liability provided the required information is timely furnished to the IRS.

U.S. Holders are urged to consult with their tax advisors regarding the applicable U.S. disclosure and information reporting requirements. In certain circumstances, the failure to comply with disclosure and information reporting requirements will result in an extension of the statute of limitations on the assessment and collection of U.S. federal income taxes applicable to the U.S. Holder.

Disclosure Requirements for Specified Foreign Financial Assets

Certain U.S. Holders (and to the extent provided in IRS guidance, certain non-U.S. Holders) who hold interests in "specified foreign financial assets" (as defined in Section 6038D of the Code) are generally required to file an IRS Form 8938 as part of their U.S. federal income tax returns with information relating to such assets for each taxable year in which the aggregate value of all such assets exceeds $75,000 at any time during the taxable year or $50,000 on the last day of the taxable year (or such higher dollar amount as prescribed by applicable IRS guidance). "Specified foreign financial assets" generally include, among other assets, financial accounts maintained by foreign financial institutions, and our common shares, unless the shares are held through an account maintained with a financial institution. Substantial penalties may apply to any failure to timely file IRS Form 8938. Additionally, in the event an applicable U.S. Holder (and to the extent provided in IRS guidance, a non-U.S. Holder) that is required to file IRS Form 8938 does not file such form, the statute of limitations on the assessment and collection of U.S. federal income taxes of such holder for the related tax year may not close until three years after the date that the required information is filed. Prospective investors are encouraged to consult with their own tax advisors regarding the possible reporting obligations under these disclosure requirements.

Canadian Federal Income Tax Information

The following summary describes, as of the date hereof, the principal Canadian federal income tax consequences under the Income Tax Act (Canada), or the Canadian Tax Act, generally applicable to a holder, or a Holder, who acquires the common shares pursuant to this offering and who, for the purposes of the Canadian Tax Act, and at all relevant times, beneficially owns the common shares as capital property, and deals at arm's length with, and is not affiliated with, us or the underwriters. The common shares will generally be considered to be capital property for this purpose unless either the Holder holds (or will hold) such common shares in the course of carrying on a business of trading or dealing in securities, or the Holder has acquired (or will acquire) such common shares in a transaction or transactions considered to be an adventure or concern in the nature of trade.

This summary is not applicable to: (a) a Holder that is a "financial institution," as defined in the Canadian Tax Act for purposes of the mark-to-market rules; (b) a Holder, an interest in which is or would be a "tax shelter investment" as defined in the Canadian Tax Act; (c) a Holder that is a "specified financial institution" as defined in the Canadian Tax Act; (d) a Holder that is a corporation that has elected in the prescribed form and manner and has otherwise met the requirements to use functional currency tax reporting as set out in the Canadian Tax Act; (e) a Holder that is a corporation resident in Canada, and is, or becomes, controlled by a non-resident corporation for the purposes of the "foreign affiliate dumping" rules in section 212.3 of the Canadian Tax Act; or (f) a Holder that, with respect to the common shares, has or that has entered into a "synthetic disposition arrangement " or a "derivative forward agreement" as those terms are defined in the Canadian Tax Act. In addition, this summary does not address the deductibility of interest by a holder of common shares that has borrowed money or otherwise incurred debt in connection with the acquisition of common shares. Any such Holder to which this summary does not apply should consult its own tax advisor.

This summary is based upon the current provisions of the Canadian Tax Act, the regulations adopted thereunder, or the Canadian Tax Regulations, and counsel's understanding of the current published administrative and assessing policies and practices of the Canada Revenue Agency. The summary also takes into account all specific proposals to amend the Canadian Tax Act and the Canadian Tax Regulations that have been publicly announced by or on behalf of the Minister of Finance (Canada) prior to the date hereof, or the Canadian Tax Proposals, and assumes that all such Canadian Tax Proposals will be enacted in the form proposed. No assurance can be given that the Canadian Tax Proposals will be enacted in the form proposed or at all. This summary does not otherwise take into account or anticipate any changes in law, administrative policy or assessing practice, whether by way of legislative, regulatory, judicial or administrative action or interpretation, nor does it address any provincial, territorial or foreign tax considerations.

This summary is not exhaustive of all possible Canadian federal income tax considerations of purchasing common shares. The summary is of a general nature only and is not intended to be, and should not be construed to be, legal, business, or tax advice to any prospective Holder. Prospective Holders should consult their own tax advisors as to the Canadian federal tax consequences, and the tax consequences of any other jurisdiction, applicable to them having regard to their own particular circumstances.

All amounts in a currency other than the Canadian dollar relating to the acquisition, holding and disposition of the common shares must be converted into Canadian dollars based on the exchange rates determined in accordance with the Canadian Tax Act. The amount of dividends to be included in income, and capital gains and losses realized by a Holder, may be affected by fluctuations in the relevant exchange rates.

Residents of Canada

The following discussion applies to Holders who, for the purposes of the Canadian Tax Act, and at all relevant times, are residents of Canada, or Canadian Resident Holders.

Certain Canadian Resident Holders whose common shares might not otherwise qualify as capital property may, in certain circumstances, treat such common shares and every Canadian security, as defined in the Canadian Tax Act, owned or subsequently acquired by such holder as capital property by making an irrevocable election pursuant to subsection 39(4) of the Canadian Tax Act. Canadian Resident Holders contemplating making a subsection 39(4) election should consult their advisor for advice as to whether the election is available or advisable in their particular circumstances.

Dividends on the Common Shares

Dividends received or deemed to be received on the common shares by a Canadian Resident Holder who is an individual (other than certain trusts) will be included in income and will be subject to the gross-up and dividend tax credit rules normally applicable under the Canadian Tax Act to taxable dividends received from taxable Canadian corporations (as defined in the Canadian Tax Act). We may designate all or a portion of such dividends as "eligible dividends" that are entitled to an enhanced gross-up and dividend tax credit regime. We will notify our shareholders of any such designations at the appropriate times.

Dividends received or deemed to be received on the common shares by a Canadian Resident Holder that is a corporation will be included in its income and will generally be deductible in computing its taxable income. A Canadian Resident Holder that is a "private corporation" or a "subject corporation," each as defined in the Canadian Tax Act, may be liable under Part IV of the Canadian Tax Act to pay a refundable tax at a rate of 33 $^1/_3$% on dividends received or deemed to be received on the common shares to the extent such dividends are deductible in computing the Canadian Resident Holder's taxable income. Such refundable tax will generally be refunded to a corporate Canadian Resident Holder at the rate of CAD$1.00 for every CAD$3.00 of taxable dividends paid while it is a private corporation.

Dispositions of the Common Shares

A disposition, or a deemed disposition, of a common share (other than to us unless purchased by us in the open market in the manner in which shares are normally purchased by any member of the public in the open market) by a Canadian Resident Holder will generally give rise to a capital gain (or a capital loss) equal to the amount by which the proceeds of disposition of the common share, net of any reasonable costs of disposition, exceed (or are less than) the adjusted cost base of the common share to the Canadian Resident Holder. For this purpose, the adjusted cost base to a Canadian Resident Holder of the common shares will be determined at any time by averaging the cost of such common shares with the adjusted cost base of any other common shares owned by the holder as capital property at that time. Such capital gain (or capital loss) will be subject to the treatment described below under "Taxation of Capital Gains and Capital Losses."

Refundable Tax

A Canadian Resident Holder that is throughout the year a "Canadian-controlled private corporation," as defined in the Canadian Tax Act, may be liable to pay a refundable tax at a rate of $6\,^{2}/_{3}$% on certain investment income, including taxable capital gains (as defined below), but excluding dividends or deemed dividends deductible in computing taxable income. Such refundable tax will generally be refunded to a corporate Canadian Resident Holder at the rate of CAD$1.00 for every CAD$3.00 of taxable dividends paid while it is a private corporation.

Taxation of Capital Gains and Capital Losses

Generally, one-half of any capital gain (a taxable capital gain) realized by a Canadian Resident Holder for a taxation year must be included in the Canadian Resident Holder's income in the year. Subject to and in accordance with the provisions of the Canadian Tax Act, a Canadian Resident Holder is required to deduct one-half of any capital loss (an allowable capital loss) realized in the year from taxable capital gains realized in that year, and allowable capital losses in excess of taxable capital gains may be carried back and deducted in any of the three preceding taxation years, or carried forward and deducted in any subsequent year, from net taxable capital gains realized in such years (but not against other income) to the extent and under the circumstances described in the Canadian Tax Act. If the Canadian Resident Holder is a corporation, any such capital loss realized on the sale of a common share may in certain circumstances be reduced by the amount of any dividends which have been received or which are deemed to have been received on the common share. Similar rules may apply where a corporation is a member of a partnership or a beneficiary of a trust that owns shares, directly or indirectly through a partnership or a trust.

Minimum Tax

Individuals, including certain trusts, are subject to a minimum tax. Generally, dividends received or deemed to be received on the common shares and capital gains realized on the disposition of common shares may result in a Canadian Resident Holder being liable for minimum tax. Canadian Resident Holders should consult with their own tax advisors with respect to the potential application of the minimum tax.

Non-Residents of Canada

The following discussion applies to a Holder who, for the purposes of the Canadian Tax Act, and at all relevant times, is not (and is not deemed to be) resident in Canada and will not use or hold (and will not be deemed to use or hold) the common shares in, or in the course of, carrying on a business or part of a business in Canada, or a Non-Resident of Canada Holder. In addition, this discussion does not apply to a Non-Resident of Canada Holder that carries on or is deemed to carry on, an insurance business in Canada and elsewhere or to an "authorized foreign bank," as defined in the Canadian Tax Act, or to a Non-Resident of Canada Holder that would be subject to the proposed "treaty shopping" provisions included for discussion purposes in the 2014 Canadian Federal Budget tabled on February 11, 2014, if those provisions were law. Such Holders should consult their own tax advisors.

Dividends on the Common Shares

Canadian withholding tax at a rate of 25% (subject to reduction under the provisions of any applicable income tax treaty or convention) will be payable on the gross amount of dividends on the common shares paid or credited, or deemed to be paid or credited, to a Non-Resident of Canada Holder. The Canadian withholding taxes will be deducted directly by us or our paying agent from the amount of the dividend otherwise payable and remitted to the Receiver General of Canada. The rate of withholding tax applicable to a dividend paid on the common shares to a Non-Resident of Canada Holder who is a resident of the U.S. for purposes of the Canada-U.S. Tax Convention, or the Convention, beneficially owns the dividend and qualifies for the full benefits of the Convention will generally be reduced to 15% or, if such a Non-Resident of Canada Holder is a corporation that owns at least 10% of our voting shares, to 5%. Not all persons who are residents of the U.S. for purposes of the Convention will qualify for the benefits of the Convention. A Non-Resident Holder of Canada who is a resident of the U.S. is advised to consult its tax advisor in this regard. The rate of withholding tax on dividends is also reduced under other bilateral income tax treaties or conventions to which Canada is a signatory.

Dispositions of the Common Shares

A Non-Resident of Canada Holder will not be subject to tax under the Canadian Tax Act in respect of any capital gain realized by such Non-Resident of Canada Holder on a disposition, or deemed disposition, of the common shares unless the common shares constitute "taxable Canadian property," as defined in the Canadian Tax Act, of the Non-Resident of Canada Holder at the time of disposition and the holder is not entitled to an exemption under the applicable income tax treaty or convention. As long as the common shares are then listed on a "designated stock exchange" (which currently includes the NASDAQ), the common shares generally will not constitute taxable Canadian property of a Non-Resident of Canada Holder, unless (a) at any time during the 60-month period preceding the disposition: (i) one or any combination of (A) the Non-Resident of Canada Holder, (B) persons not dealing at arm's length with such Non-Resident of Canada Holder, and (C) pursuant to certain Canadian Tax Proposals released on July 12, 2013, partnerships in which the Non-Resident of Canada Holder or a person described in (B) holds a membership interest directly or indirectly through one or more partnerships, owned 25% or more of our issued shares of any class or series; and (ii) more than 50% of the fair market value of the common shares was derived, directly or indirectly, from a combination of real or immoveable property situated in Canada, "Canadian resource properties," as such term is defined in the Canadian Tax Act, "timber resource properties," as such term is defined in the Canadian Tax Act, or options in respect of interests in, or for civil law rights in, any such properties whether or not the property exists, or (b) the common shares are otherwise deemed to be taxable Canadian property. If the common shares are considered taxable Canadian property to a Non-Resident of Canada Holder, an applicable income tax treaty or convention may in certain circumstances exempt that Non-Resident of Canada Holder from tax under the Canadian Tax Act in respect of the disposition or deemed disposition of the common shares. Non-Resident of Canada Holders whose common shares are, or may be, taxable Canadian property should consult their own tax advisors for advice having regard to their particular circumstances.

As long as the common shares are listed at the time of their disposition or deemed disposition on a "recognized stock exchange" (which currently includes the NASDAQ), as defined in the Canadian Tax Act, a Non-Resident of Canada Holder who disposes of common shares that are taxable Canadian property will not be required to satisfy the obligations imposed under section 116 of the Canadian Tax Act and, as such, the purchaser of such shares will not be required to withhold any amount on the purchase price paid. An exemption from such requirements may also be available in respect of such disposition if the common shares are "treaty-exempt property," as defined in the Canadian Tax Act.

In the event that a common share constitutes taxable Canadian property of a Non-Resident of Canada Holder and any capital gain that would be realized on the disposition or deemed disposition thereof is not exempt from tax under the Canadian Tax Act pursuant to an applicable income tax convention or treaty, the income tax consequences discussed under "Residents of Canada—Dispositions of the Common Shares" and "Residents of Canada—Taxation of Capital Gains and Capital Losses" will generally apply to the Non-Resident of Canada Holder but any such Holder should consult its own tax advisor in this regard.

UNDERWRITING

Subject to the terms and conditions set forth in the underwriting agreement, dated , 2014, among us and Jefferies LLC and Cowen and Company, LLC, as the representatives of the underwriters named below and the joint book-running managers of this offering, we have agreed to sell to the underwriters, and each of the underwriters has agreed, severally and not jointly, to purchase from us on or before , 2014, the respective number of common shares shown opposite its name below at a price per share of $, payable to us against delivery:

UNDERWRITERS	NUMBER OF SHARES
Jefferies LLC	
Cowen and Company, LLC	
Wells Fargo Securities, LLC	
RBC Capital Markets, LLC	
Total	

The underwriting agreement provides that the obligations of the several underwriters are subject to certain conditions precedent, such as the receipt by the underwriters of officers' certificates and legal opinions and approval of certain legal matters by their counsel and may be terminated at their discretion upon the occurrence of certain stated events. The underwriting agreement provides that the underwriters will purchase all of the common shares if any of them are purchased, other than those shares covered by the option to purchase additional common shares described below. If an underwriter defaults, the underwriting agreement provides that the purchase commitments of the non-defaulting underwriters may be increased or the underwriting agreement may be terminated. We have agreed to indemnify the underwriters and certain of their controlling persons against certain liabilities, including liabilities under the Securities Act of 1933, as amended, or the Securities Act, and to contribute to payments that the underwriters may be required to make in respect of those liabilities.

The underwriters have advised us that, following the completion of this offering, they currently intend to make a market in our common shares as permitted by applicable laws and regulations. However, the underwriters are not obligated to do so, and the underwriters may discontinue any market-making activities at any time without notice in their sole discretion. Accordingly, no assurance can be given as to the liquidity of the trading market for our common shares, that you will be able to sell any of the common shares held by you at a particular time or that the prices that you receive when you sell will be favorable.

The underwriters are offering the common shares subject to their acceptance of the common shares from us and subject to prior sale. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part. In addition, the underwriters have advised us that they do not intend to confirm sales to any account over which they exercise discretionary authority.

Commission and Expenses

The underwriters have advised us that they propose to offer the common shares to the public at the initial public offering price set forth on the cover page of this prospectus and to certain dealers, which may include the underwriters, at that price less a concession not in excess of $ per common share. After the offering, the initial public offering price and the concession to dealers may be reduced by the representatives of the underwriters. No such reduction will change the amount of proceeds to be received by us as set forth on the cover page of this prospectus.

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The following table shows the public offering price, the underwriting discounts and commissions that we are to pay the underwriters and the proceeds, before expenses, to us in connection with this offering. Such amounts are shown assuming both no exercise and full exercise of the underwriters' option to purchase additional shares.

	PER SHARE		TOTAL	
	WITHOUT OPTION TO PURCHASE ADDITIONAL SHARES	WITH OPTION TO PURCHASE ADDITIONAL SHARES	WITHOUT OPTION TO PURCHASE ADDITIONAL SHARES	WITH OPTION TO PURCHASE ADDITIONAL SHARES
Public offering price	$	$	$	$
Underwriting discounts and commissions paid by us	$	$	$	$
Proceeds to us, before expenses	$	$	$	$

We estimate expenses payable by us in connection with this offering, other than the underwriting discounts and commissions referred to above, will be approximately $. We have also agreed to reimburse the underwriters for certain of their expenses in an amount up to $ as set forth in the underwriting agreement.

Determination of Offering Price

Prior to this offering, there has not been a public market for our common shares. Consequently, the initial public offering price for our common shares will be determined by negotiations between us and the representatives of the underwriters. Among the factors to be considered in these negotiations will be prevailing market conditions, our financial information, market valuations of other companies that we and the underwriters believe to be comparable to us, estimates of our business potential, the present state of our development and other factors deemed relevant.

We offer no assurances that the initial public offering price will correspond to the price at which our common shares will trade in the public market subsequent to the offering or that an active trading market for our common shares will develop and continue after the offering.

Listing

We intend to apply to have our common shares approved for listing on The NASDAQ Global Market under the trading symbol "XENE".

Option to Purchase Additional Shares

We have granted to the underwriters an option, exercisable for 30 days from the date of this prospectus, to purchase, from time to time, in whole or in part, up to an aggregate of common shares from us at the public offering price set forth on the cover page of this prospectus, less underwriting discounts and commissions. If the underwriters exercise this option, each underwriter will be obligated, subject to specified conditions, to purchase a number of additional shares proportionate to that underwriter's initial purchase commitment as indicated in the table above. This option may be exercised only if the underwriters sell more common shares than the total number set forth on the cover page of this prospectus.

No Sales of Similar Securities

We, all our officers and directors and holders of substantially all of our outstanding common shares and other securities have agreed, subject to specified exceptions, not to directly or indirectly:

- sell, offer, contract or grant any option to sell (including any short sale), lend, pledge, transfer, establish or increase an open "put equivalent position" or liquidate or decrease a "call equivalent position" within the meaning of Rule 16a-1(h) and Rule 16a-1(b) under the Securities Exchange Act of 1934, as amended, or the Exchange Act, or
- otherwise dispose of any common shares, options or warrants to acquire common shares, or securities exchangeable or exercisable for or convertible into common shares currently or hereafter owned either of record or beneficially, or

- enter into any swap, hedge or similar arrangement or agreement that transfers, in whole or in part, the economic risk of ownership of common shares, or of options or warrants to acquire common shares, or securities or rights exchangeable or exercisable for or convertible into common shares, or
- make any demand for, or exercise any right with respect to, the registration under the Securities Act of the offer and sale of any common shares, or of options or warrants to acquire common shares, or securities or rights exchangeable or exercisable for or convertible into common shares, or cause to be filed a registration statement, prospectus or prospectus supplement (or an amendment or supplement thereto) with respect to any such registration, or
- publicly announce an intention to do any of the foregoing for a period of 180 days after the date of this prospectus without the prior written consent of the representatives of the underwriters.

The foregoing restriction terminates after the close of trading of our common shares on and including the 180^{th} day after the date of this prospectus and shall not apply to our issuance during the 180-day restricted period of a number of common shares not greater than 5% of the total number of common shares outstanding to one or more counterparties in connection with the consummation of any strategic transaction.

The representatives of the underwriters may, in their sole discretion and at any time or from time to time before the termination of the 180-day period release all or any portion of the securities subject to lock-up agreements. There are no existing agreements between the underwriters and any of our shareholders who will execute a lock-up agreement, providing consent to the sale of shares prior to the expiration of the lock-up period.

Stabilization

The underwriters have advised us that, pursuant to Regulation M under the Exchange Act, certain persons participating in the offering may engage in short sale transactions, stabilizing transactions, syndicate covering transactions or the imposition of penalty bids in connection with this offering. These activities may have the effect of stabilizing or maintaining the market price of our common shares at a level above that which might otherwise prevail in the open market. Establishing short sales positions may involve either “covered” short sales or “naked” short sales.

“Covered” short sales are sales made in an amount not greater than the underwriters’ option to purchase additional common shares in this offering. The underwriters may close out any covered short position by either exercising their option to purchase additional common shares or purchasing common shares in the open market. In determining the source of common shares to close out the covered short position, the underwriters will consider, among other things, the price of common shares available for purchase in the open market as compared to the price at which they may purchase common shares through the option to purchase additional common shares.

“Naked” short sales are sales in excess of the option to purchase additional common shares. The underwriters must close out any naked short position by purchasing common shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the common shares in the open market after pricing that could adversely affect investors who purchase in this offering.

A stabilizing bid is a bid for the purchase of common shares on behalf of the underwriters for the purpose of fixing or maintaining the price of the common shares. A syndicate covering transaction is the bid for or the purchase of common shares on behalf of the underwriters to reduce a short position incurred by the underwriters in connection with the offering. Similar to other purchase transactions, an underwriter’s purchases to cover the syndicate short sales may have the effect of raising or maintaining the market price of our common shares or preventing or retarding a decline in the market price of our common shares. As a result, the price of our common shares may be higher than the price that might otherwise exist in the open market. A penalty bid is an arrangement permitting the underwriters to reclaim the selling concession otherwise accruing to a syndicate member in connection with the offering if the common shares originally sold by such syndicate member are purchased in a syndicate covering transaction and therefore have not been effectively placed by such syndicate member.

Neither we nor any of the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of our common shares. The underwriters are not obligated to engage in these activities and, if commenced, any of the activities may be discontinued at any time.

The underwriters may also engage in passive market making transactions in our common shares on The NASDAQ Global Market in accordance with Rule 103 of Regulation M during a period before the commencement of offers or sales of common shares in this offering and extending through the completion of distribution. A passive market maker must display its bid at a price not in excess of the highest independent bid of that security. However, if all independent bids are lowered below the passive market maker's bid, that bid must then be lowered when specified purchase limits are exceeded.

Electronic Distribution

A prospectus in electronic format may be made available by e-mail or on the websites or through online services maintained by one or more of the underwriters or their affiliates. In those cases, prospective investors may view offering terms online and may be allowed to place orders online. The underwriters may agree with us to allocate a specific number of common shares for sale to online brokerage account holders. Any such allocation for online distributions will be made by the underwriters on the same basis as other allocations. Other than the prospectus in electronic format, the information on the underwriters' websites and any information contained in any other website maintained by any of the underwriters is not part of this prospectus, has not been approved and/or endorsed by us or the underwriters and should not be relied upon by investors.

Other Activities and Relationships

The underwriters and certain of their respective affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, investment research, principal investment, hedging, financing and brokerage activities. The underwriters and certain of their respective affiliates have, from time to time, performed, and may in the future perform, various commercial and investment banking and financial advisory services for us and our affiliates, for which they received or will receive customary fees and expenses.

In the ordinary course of their various business activities, the underwriters and certain of their respective affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers, and such investment and securities activities may involve securities and/or instruments issued by us and our affiliates. In particular, an affiliate of RBC Capital Markets, LLC owns Series B preferred shares, Series E preferred shares and conversion rights for Series E preferred shares, which in the aggregate represent less than 5% of our common shares as adjusted to reflect the conversion of all outstanding preferred shares and subscription rights. The affiliate of RBC Capital Markets, LLC is not selling any shares in this offering, will not receive any of the net proceeds in this offering and is subject to the sale restrictions described above under "—No Sales of Similar Securities". If the underwriters or their respective affiliates have a lending relationship with us, they routinely hedge their credit exposure to us consistent with their customary risk management policies. The underwriters and their respective affiliates may hedge such exposure by entering into transactions which consist of either the purchase of credit default swaps or the creation of short positions in our securities or the securities of our affiliates, including potentially the common shares offered hereby. Any such short positions could adversely affect future trading prices of the common shares offered hereby. The underwriters and certain of their respective affiliates may also communicate independent investment recommendations, market color or trading ideas and/or publish or express independent research views in respect of such securities or instruments and may at any time hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

Disclaimers About Non-U.S. and Canadian Jurisdictions

This offering is being made concurrently in the United States and the Provinces of British Columbia, Alberta and Ontario in Canada. Our common shares will be offered in the United States and Canada through the underwriters, either directly or through their respective United States or Canadian broker-dealer-affiliates or agents, as applicable. No securities will be offered or sold in any jurisdiction except by or through brokers or dealers duly registered under the applicable securities laws of that jurisdiction or in circumstances where an exemption from such registered dealer requirements is available.

European Economic Area. In relation to each Member State of the European Economic Area which has implemented the Prospectus Directive (each, a "Relevant Member State") an offer to the public of any shares which are the subject of the offering contemplated by this prospectus may not be made in that Relevant Member State except that an offer to the public in that Relevant Member State of any shares may be made at any time under the following exemptions under the Prospectus Directive, if they have been implemented in that Relevant Member State:

(a) to legal entities which are authorized or regulated to operate in the financial markets or, if not so authorized or regulated, whose corporate purpose is solely to invest in securities;
(b) to any legal entity which has two or more of (1) an average of at least 250 employees during the last financial year; (2) a total balance sheet of more than €43,000,000 and (3) an annual net turnover of more than €50,000,000, as shown in its last annual or consolidated accounts;
(c) to fewer than 100 natural or legal persons (other than qualified investors as defined in the Prospectus Directive) subject to obtaining the prior consent of the representatives of the underwriters for any such offer; or
(d) in any other circumstances falling within Article 3(2) of the Prospectus Directive, provided that no such offer of the shares shall result in a requirement for the publication by us or any underwriter of a prospectus pursuant to Article 3 of the Prospectus Directive.

Each person in a Relevant Member State who receives any communication in respect of, or who acquires any shares under, the offers contemplated in this prospectus will be deemed to have represented, warranted and agreed to and with each underwriter and us that:

(a) it is a qualified investor within the meaning of the law in that Relevant Member State implementing Article 2(1)(e) of the Prospectus Directive; and
(b) in the case of any shares acquired by it as a financial intermediary, as that term is used in Article 3(2) of the Prospectus Directive, (i) the shares acquired by it in the offer have not been acquired on behalf of, nor have they been acquired with a view to their offer or resale to, persons in any Relevant Member State, other than qualified investors, as that term is defined in the Prospectus Directive, or in circumstances in which the prior consent of the representatives of the underwriters has been given to the offer or resale; or (ii) where shares have been acquired by it on behalf of persons in any Relevant Member State other than qualified investors, the offer of those shares to it is not treated under the Prospectus Directive as having been made to such persons.

For the purposes of this provision, the expression an “offer to the public” in relation to any shares in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and any shares to be offered so as to enable an investor to decide to purchase any shares, as the same may be varied in that Member State by any measure implementing the Prospectus Directive in that Member State and the expression “Prospectus Directive” means Directive 2003/71/EC and includes any relevant implementing measure in each Relevant Member State.

United Kingdom. Each underwriter has represented, warranted and agreed that:

(a) it has only communicated or caused to be communicated and will only communicate or cause to be communicated any invitation or inducement to engage in investment activity (within the meaning of Section 21 of the Financial Services and Markets Act 2000, or the FSMA) to persons who are investment professionals falling within Article 19(5) of the FSMA (Financial Promotion) Order 2005 or in circumstances in which Section 21(1) of the FSMA does not apply to us; and
(b) it has complied with and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to the shares in, from or otherwise involving the United Kingdom.

LEGAL MATTERS

We are being represented by Wilson Sonsini Goodrich & Rosati, Professional Corporation, Palo Alto, California. The validity of the common shares being offered by this prospectus and legal matters relating to Canadian laws will be passed upon for us by McCarthy Tétrault LLP, Vancouver, British Columbia. The underwriters are being represented by Cooley LLP, San Diego and San Francisco, California. Blake, Cassels & Graydon LLP, Vancouver, British Columbia, is acting as Canadian counsel to the underwriters. As of the date of this prospectus, the members and associates of Wilson Sonsini Goodrich & Rosati, Professional Corporation, as a group, own less than 1% of our outstanding securities, the partners and associates of McCarthy Tétrault LLP, as a group, own less than 1% of our outstanding securities, the partners and associates of Cooley LLP, as a group, own less than 1% of our outstanding securities and the partners and associates of Blake, Cassels & Graydon LLP, as a group, own less than 1% of our outstanding securities.

EXPERTS

The financial statements of Xenon Pharmaceuticals Inc. as of December 31, 2012 and 2013, and for each of the years in the three-year period ended December 31, 2013 have been included herein in reliance on the report of KPMG LLP, independent registered public accounting firm, appearing elsewhere herein, and upon the authority of said firm as experts in auditing and accounting. KPMG LLP is independent with respect to us within the meaning of the Rules of Professional Conduct of the Institute of Chartered Accountants of British Columbia and under all relevant U.S. professional and regulatory standards, including PCAOB Rule 3520.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the U.S. Securities and Exchange Commission, or the SEC, a registration statement on Form S-1 under the Securities Act of 1933, as amended, or the Securities Act, with respect to the common shares offered by this prospectus. This prospectus, which constitutes a part of the registration statement, does not contain all of the information set forth in the registration statement, some items of which are contained in exhibits to the registration statement as permitted by the rules and regulations of the SEC. For further information with respect to us and the common shares offered hereby, we refer you to the registration statement, including the exhibits filed as a part of the registration statement. Statements contained in this prospectus concerning the contents of any contract or document referred to are not necessarily complete. If a contract or document has been filed as an exhibit to the registration statement, please see the copy of the contract or document that has been filed. Each statement is this prospectus relating to a contract or document filed as an exhibit is qualified in all respects by the filed exhibit.

You may read and copy the registration statement, including the exhibits and schedules thereto, at the Public Reference Room of the SEC, 100 F Street, N.E., Washington, D.C. 20549. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC also maintains an Internet website that contains reports, proxy statements and other information about issuers, like us, that file electronically with the SEC. The address of that website is www.sec.gov.

Upon completion of this offering, we will become subject to the information and periodic reporting requirements of the Exchange Act and, in accordance therewith, will file periodic reports, proxy statements and other information with the SEC. Such periodic reports, proxy statements and other information will be available for inspection and copying at the public reference room and website of the SEC referred to above. We maintain a website at www.xenon-pharma.com. You may access our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act with the SEC free of charge at our website as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC. The reference to our website address does not constitute incorporation by reference of the information contained on our website, and you should not consider the contents of our website in making an investment decision with respect to our common shares.

XENON PHARMACEUTICALS INC.
INDEX TO FINANCIAL STATEMENTS

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and
Shareholders of Xenon Pharmaceuticals Inc.

We have audited the accompanying balance sheets of Xenon Pharmaceuticals Inc. (the "Company") as of December 31, 2012 and 2013, and the related statements of operations, comprehensive income (loss), changes in redeemable convertible preferred shares and shareholders' deficit, and cash flows for each of the years in the three-year period ended December 31, 2013. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Xenon Pharmaceuticals Inc. as of December 31, 2012 and 2013 and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2013, in conformity with U.S. generally accepted accounting principles.

/s/ KPMG LLP
Chartered Accountants

February 19, 2014
Vancouver, Canada

XENON PHARMACEUTICALS INC.

Balance Sheets

(Expressed in thousands of U.S. dollars except share data)

	DECEMBER 31, 2012	DECEMBER 31, 2013	JUNE 30, 2014 (unaudited)	PRO FORMA JUNE 30, 2014 (unaudited)
Assets				
Current assets:				
Cash and cash equivalents	$ 60,162	$ 37,950	$ 35,087	$ 35,087
Marketable securities	—	11,326	9,623	9,623
Accounts receivable	392	440	364	364
Prepaid expenses and other current assets	149	153	134	134
Total current assets	60,703	49,869	45,208	45,208
Deferred financing fees	—	2,739	3,480	3,480
Property, plant and equipment, net	2,602	1,879	2,024	2,024
Total assets	$ 63,305	$ 54,487	$ 50,712	$ 50,712
Liabilities and Shareholders' Deficit				
Current liabilities:				
Accounts payable and accrued expenses	2,181	2,283	2,149	2,149
Deferred revenue	17,015	15,920	15,082	15,082
Total current liabilities	19,196	18,203	17,231	17,231
Deferred revenue, less current portion	29,637	11,886	6,127	6,127
Deferred tenant inducements	184	282	248	248
Note payable	1,665	—	—	—
Total liabilities	$ 50,682	$ 30,371	$ 23,606	$ 23,606
Collaboration agreements (See Note 14)				
Commitments and contingencies (See Note 15)				
Redeemable convertible preferred shares:				
Series A Convertible Preferred shares, without par value; 5,860,000 authorized and 5,596,330 issued and outstanding at each of December 31, 2012 and 2013 and June 30, 2014 (unaudited), respectively, and no shares issued and outstanding pro forma	2,939	2,939	2,939	—
Series B Convertible Preferred shares, without par value; 5,000,000 authorized and 4,835,177 issued and outstanding at each of December 31, 2012 and 2013 and June 30, 2014 (unaudited), respectively, and no shares issued and outstanding pro forma	8,683	8,683	8,683	—
Series E Convertible Preferred shares, without par value; 21,242,673 authorized and 21,005,767 issued and outstanding at each of December 31, 2012 and 2013 and June 30, 2014 (unaudited), respectively, and no shares issued and outstanding pro forma	90,866	90,866	90,866	—
	102,488	102,488	102,488	—
Shareholders' (deficit) equity:				
Common shares, without par value; unlimited shares authorized; 6,467,510, 6,535,236 and 6,552,128 issued and outstanding at December 31, 2012 and 2013 and June 30, 2014 (unaudited), respectively, and 44,152,979 shares issued and outstanding pro forma	6,008	6,147	6,182	108,782
Additional paid-in capital	29,164	29,722	30,064	29,952
Accumulated deficit	(128,784)	(116,752)	(114,149)	(114,149)
Accumulated comprehensive income	3,747	2,511	2,521	2,521
Total shareholders' (deficit) equity	$ (89,865)	$ (78,372)	$ (75,382)	$ 27,106
Total liabilities, shareholders' (deficit) equity and redeemable convertible preferred shares	$ 63,305	$ 54,487	$ 50,712	$ 50,712

The accompanying notes are an integral part of these financial statements.

XENON PHARMACEUTICALS INC.

Statements of Operations

(Expressed in thousands of U.S. dollars except share and per share data)

	YEAR ENDED DECEMBER 31, 2011	YEAR ENDED DECEMBER 31, 2012	YEAR ENDED DECEMBER 31, 2013	SIX MONTHS ENDED JUNE 30, 2013 (unaudited)	SIX MONTHS ENDED JUNE 30, 2014 (unaudited)
Revenue					
Collaboration revenue	$ 6,915	$ 14,300	$ 27,352	$ 10,985	$ 10,297
Royalties	3	8	4	—	2
	6,918	14,308	27,356	10,985	10,299
Operating expenses:					
Research and development	12,302	10,455	12,303	6,983	5,099
General and administrative	6,730	7,006	5,341	2,828	2,790
Total operating expenses	19,032	17,461	17,644	9,811	7,889
Income (loss) from operations	(12,114)	(3,153)	9,712	1,174	2,410
Other income (expense):					
Interest income	153	144	338	76	278
Interest expense	(91)	(93)	(64)	(41)	—
Foreign exchange gain (loss)	60	(169)	2,035	1,920	(85)
Gain (loss) on write-off and disposal of assets	—	(1,030)	11	11	—
Net income (loss)	(11,992)	(4,301)	12,032	3,140	2,603
Net income attributable to participating securities	—	—	8,199	3,140	2,603
Net income (loss) attributable to common shareholders	$ (11,992)	$ (4,301)	$ 3,833	$ —	$ —
Net income (loss) per share attributable to common shareholders:					
Basic	$ (1.86)	$ (0.67)	$ 0.59	$ 0.00	$ 0.00
Diluted	$ (1.86)	$ (0.67)	$ 0.39	$ 0.00	$ 0.00
Weighted-average shares outstanding:					
Basic	6,433,423	6,451,782	6,501,373	6,477,826	6,547,918
Effects of dilutive securities:					
Stock options	—	—	3,204,014	—	—
Subscription rights	—	—	59,671	—	—
Diluted	6,433,423	6,451,782	9,765,058	6,477,826	6,547,918
Pro forma net income per share attributable to common shareholders (unaudited):					
Basic			$ 0.27		$ 0.06
Diluted			$ 0.25		$ 0.05
Pro forma weighted-average shares outstanding (unaudited):					
Basic			44,110,085		44,155,062
Diluted			47,314,099		47,765,486

The accompanying notes are an integral part of these financial statements.

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XENON PHARMACEUTICALS INC.

Statements of Comprehensive Income (Loss)
(Expressed in thousands of U.S. dollars)

	YEAR ENDED DECEMBER 31,			SIX MONTHS ENDED JUNE 30,	
	2011	2012	2013	2013	2014
				(unaudited)	
Net income (loss)	$(11,992)	$(4,301)	$12,032	$3,140	$2,603
Other comprehensive income (loss):					
Foreign currency translation adjustment	(293)	342	(1,236)	(790)	10
Unrealized gain (loss) on marketable securities measured at fair value	4	(4)	—	—	—
Comprehensive income (loss)	$(12,281)	$(3,963)	$10,796	$2,350	$2,613

The accompanying notes are an integral part of these financial statements.

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XENON PHARMACEUTICALS INC.

Statements of Changes in Redeemable Convertible Preferred Shares and Shareholders' Deficit

(Expressed in thousands of U.S. dollars except share and per share data)

	SERIES A CONVERTIBLE PREFERRED SHARES		SERIES B CONVERTIBLE PREFERRED SHARES		SERIES E CONVERTIBLE PREFERRED SHARES		COMMON SHARES		ADDITIONAL PAID-IN CAPITAL	ACCUMULATED DEFICIT	ACCUMULATED COMPREHENSIVE INCOME	TOTAL SHAREHOLDERS' DEFICIT
	SHARES	AMOUNT	SHARES	AMOUNT	SHARES	AMOUNT	SHARES	AMOUNT				
Balance as of January 1, 2011	5,596,330	$ 2,939	4,835,177	$ 8,683	21,005,767	$ 90,866	6,430,791	$ 5,980	$ 28,328	$ (112,491)	$ 3,698	$ (74,485)
Net loss for the year	—	—	—	—	—	—	—	—	—	(11,992)	—	(11,992)
Unrealized gain on fair value of marketable securities	—	—	—	—	—	—	—	—	—	—	4	4
Cumulative translation adjustment	—	—	—	—	—	—	—	—	—	—	(293)	(293)
Stock option compensation expense	—	—	—	—	—	—	—	—	435	—	—	435
Subscription rights	—	—	—	—	—	—	—	—	12	—	—	12
Issuance of common shares on conversion of subscription rights	—	—	—	—	—	—	3,140	2	(2)	—	—	—
Issued pursuant to exercise of stock options	—	—	—	—	—	—	2,124	4	(1)	—	—	3
Balance as of December 31, 2011	5,596,330	$ 2,939	4,835,177	$ 8,683	21,005,767	$ 90,866	6,436,055	$ 5,986	$ 28,772	$ (124,483)	$ 3,409	$ (86,316)
Net loss for the year	—	—	—	—	—	—	—	—	—	(4,301)	—	(4,301)
Unrealized loss on fair value of marketable securities	—	—	—	—	—	—	—	—	—	—	(4)	(4)
Cumulative translation adjustment	—	—	—	—	—	—	—	—	—	—	342	342
Stock option compensation expense	—	—	—	—	—	—	—	—	406	—	—	406
Subscription rights	—	—	—	—	—	—	—	—	8	—	—	8
Issuance of common shares on conversion of subscription rights	—	—	—	—	—	—	31,455	22	(22)	—	—	—
Balance as of December 31, 2012	5,596,330	$ 2,939	4,835,177	$ 8,683	21,005,767	$ 90,866	6,467,510	$ 6,008	29,164	$ (128,784)	$ 3,747	$ (89,865)
Net income for the year	—	—	—	—	—	—	—	—	—	12,032	—	12,032
Cumulative translation adjustment	—	—	—	—	—	—	—	—	—	—	(1,236)	(1,236)
Stock option compensation expense	—	—	—	—	—	—	—	—	575	—	—	575
Subscription rights	—	—	—	—	—	—	—	—	73	—	—	73
Issuance of common shares on conversion of subscription rights	—	—	—	—	—	—	27,226	45	(45)	—	—	—
Issued pursuant to exercise of stock options rights	—	—	—	—	—	—	40,500	94	(45)	—	—	49
Balance as of December 31, 2013	5,596,330	$ 2,939	4,835,177	$ 8,683	21,005,767	$ 90,866	6,535,236	$ 6,147	$ 29,722	$ (116,752)	$ 2,511	$ (78,372)
Net income for the period	—	—	—	—	—	—	—	—	—	2,603	—	2,603
Cumulative translation adjustment	—	—	—	—	—	—	—	—	—	—	10	10
Stock option compensation expense	—	—	—	—	—	—	—	—	373	—	—	373
Issuance of common shares on conversion of subscription rights	—	—	—	—	—	—	13,142	27	(27)	—	—	—
Issued pursuant to exercise of stock options	—	—	—	—	—	—	3,750	8	(4)	—	—	4
Balance as of June 30, 2014 (unaudited)	5,596,330	$ 2,939	4,835,177	$ 8,683	21,005,767	$ 90,866	6,552,128	$ 6,182	$ 30,064	$ (114,149)	$ 2,521	$ (75,382)

The accompanying notes are an integral part of these financial statements.

XENON PHARMACEUTICALS INC.

Statements of Cash Flows

(Expressed in thousands of U.S. dollars)

	YEAR ENDED DECEMBER 31,			SIX MONTHS ENDED JUNE 30,	
	2011	2012	2013	2013	2014
				(unaudited)	
Operating activities:					
Net income (loss)	$(11,992)	$ (4,301)	$ 12,032	$ 3,140	$ 2,603
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:					
Depreciation and amortization	1,132	786	705	372	350
Loss (gain) on write-off and disposal of assets	—	1,030	(11)	(11)	—
Stock-based compensation	435	406	575	273	373
Non-cash compensation on issuance of subscription rights	12	8	73	43	—
Interest accrued on note payable	78	77	—	35	—
Deferred tenant inducements	—	183	(115)	(27)	(33)
Foreign exchange loss (gain)	(88)	(34)	94	33	8
Changes in operating assets and liabilities:					
Accounts receivable	(11,008)	11,230	(76)	(423)	73
Prepaid expenses, and other current assets	(107)	162	(14)	(589)	18
Accounts payable and accrued expenses	(354)	540	(228)	(195)	(126)
Deferred revenue	8,203	35,486	(16,357)	(8,265)	(6,333)
Net cash provided by (used in) operating activities	(13,689)	45,573	(3,322)	(5,614)	(3,067)
Investing activities:					
Purchases of property, plant and equipment	(290)	(526)	(156)	(68)	(497)
Sale of property, plant and equipment	—	7	10	—	—
Purchase of marketable securities	—	—	(17,876)	—	(2,946)
Proceeds from marketable securities	14,179	1,010	6,550	—	4,568
Net cash provided by (used in) investing activities	13,889	491	(11,472)	(68)	1,125
Financing activities:					
Note payable	—	—	(1,701)	(1,701)	—
Deferred financing costs	—	—	(2,739)	—	(730)
Proceeds from issuance of common shares	2	—	49	4	4
Net cash provided by (used in) financing activities	2	—	(4,391)	(1,697)	(726)
Effect of exchange rate changes on cash and cash equivalents	(314)	170	(3,027)	(2,971)	(195)
Increase (decrease) in cash and cash equivalents	(112)	46,234	(22,212)	(10,350)	(2,863)
Cash and cash equivalents, beginning of period	14,040	13,928	60,162	60,162	37,950
Cash and cash equivalents, end of period	$ 13,928	$60,162	$ 37,950	$ 49,812	$35,087
Supplemental information:					
Non-cash transactions:					
Fair value of stock options transferred from additional paid-in capital to share capital on exercise	$ 1	—	45	$ —	$ 4
Issuance of common shares on conversion of subscription rights	$ 2	$ 22	$ 45	2	27
Interest paid	$ (13)	$ (16)	$ (69)	(207)	—

The accompanying notes are an integral part of these financial statements.

XENON PHARMACEUTICALS INC.

Notes to Financial Statements

(Expressed in thousands of U.S. dollars except share and per share figures)

1. Nature of the Business and Basis of Presentation:

(a) Description of business:

Xenon Pharmaceuticals Inc. (the "Company"), incorporated in 1996 under the British Columbia Business Corporations Act and continued federally in 2000 under the Canada Business Corporation Act, is a clinical-stage biopharmaceutical company discovering and developing a pipeline of differentiated therapeutics for orphan indications that it intends to commercialize on its own, and for larger market indications that it intends to partner with global pharmaceutical companies.

Historically, the Company has funded operations primarily through payments received from its pharmaceutical collaborators and government funding as well as through the sale of redeemable convertible preferred shares in various financing transactions. The Company is seeking to complete an Initial Public Offering ("IPO") of its common shares in the United States. In the event that the Company does not complete an IPO, the Company may seek alternative funding, such as through existing or new collaboration agreements or through private financings.

These financial statements are presented in U.S. dollars.

The accompanying unaudited interim financial statements and audited annual financial statements of the Company have been prepared in accordance with United States generally accepted accounting principles ("U.S. GAAP"). The accompanying interim financial information is unaudited and reflects all adjustments, consisting of normal recurring adjustments, which, in the opinion of management, are necessary for a fair presentation of results for the interim periods presented.

(b) Unaudited pro forma information:

On August 12, 2013, the Company's board of directors authorized the Company to submit a confidential draft registration statement to the Securities and Exchange Commission to sell its common shares to the public. Upon the closing of a qualified IPO satisfying certain threshold requirements, or approved by a combination of shareholder votes representing a majority of all preferred shares, along with a majority of the Series B shares and a majority of the Series E shares, all of the outstanding redeemable convertible preferred shares (see Note 10) will automatically convert into common shares.

The outstanding Series A preferred shares and Series B preferred shares will convert into an aggregate of 10,431,507 common shares. Each Series E preferred share is currently convertible at any time at the option of the holder into common shares on a 1:1 basis, subject to certain adjustments. These adjustments differ for some of the Company's outstanding Series E preferred shares depending on the date of issue, resulting in different conversion ratios for different Series E preferred shares. The conversion rights associated with each of the Company's Series E preferred shares will increase by 20% if the initial public offering price is below a certain price per share. The unaudited pro forma information has been prepared on the basis that the conversion rights associated with each of the Company's Series E preferred shares will increase by 20% and that all of the Company's outstanding Series E preferred shares will therefore convert into 27,117,534 common shares.

The accompanying unaudited pro forma balance sheet as of June 30, 2014 has been prepared to give effect to (i) the automatic conversion of all of the outstanding redeemable convertible preferred shares into an aggregate of 37,549,041 common shares, as described above, and (ii) the exchange of all outstanding subscription rights into common shares as though the proposed IPO had occurred on June 30, 2014. Unaudited pro forma basic and diluted net income per share attributable to common shareholders for the year ended December 31, 2013 and the six months ended June 30, 2014 have been prepared to give effect to (i) the automatic conversion of all of the outstanding redeemable convertible preferred shares into an aggregate of 37,549,041 common shares, as described above, and (ii) the exchange of the weighted-average number of outstanding subscription rights for the period into an aggregate of 58,103 common shares.

XENON PHARMACEUTICALS INC.

Notes to Financial Statements

(Expressed in thousands of U.S. dollars except share and per share figures) (continued)

2. Significant Accounting Policies:

(a) Use of estimates:

The preparation of financial statements in conformity with U.S. GAAP requires the Company to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Significant areas of estimates include, but are not limited to, the valuation of accounts receivable, the estimated useful lives of property, plant and equipment, the recoverability of long-lived assets, the timing of revenue recognition, the determination of stock-based compensation and the assessment of contingent liabilities. Actual results could differ materially from those estimates. Estimates and assumptions are reviewed quarterly. All revisions to accounting estimates are recognized in the period in which the estimates are revised and in any future periods affected.

(b) Cash and cash equivalents:

Cash equivalents are highly liquid investments that are readily convertible into cash with terms to maturity of three months or less when acquired.

(c) Segment and geographic information:

Operating segments are defined as components of an enterprise about which separate discrete information is available for evaluation by the chief operating decision maker, or decision making group, in deciding how to allocate resources and in assessing performance. The Company views its operations and manages its business in one operating segment.

(d) Property, plant and equipment:

Property, plant and equipment is stated at historical cost less accumulated depreciation and/or accumulated impairment losses, if any. Subsequent costs are included in the asset's carrying amount or recognized as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Company and the cost of the item can be measured reliably. All other repairs and maintenance are charged to net income (loss) during the financial period in which they are incurred.

Property, plant and equipment are recorded at cost and are amortized over their estimated useful lives using the straight-line method based on the following rates:

ASSET	RATE
Research equipment	5 years
Office furniture and equipment	5 years
Computer equipment	3 years
Leasehold improvements	Over the lesser of lease term or estimated useful life

(e) Impairment of long-lived assets:

The Company monitors its long-lived assets for indicators of impairment. If such indicators are present, the Company assesses the recoverability of affected assets by determining whether the carrying value of such assets is less than the sum of the undiscounted future cash flows of the assets. If such assets are found not to be recoverable, the Company measures the amount of such impairment by comparing the carrying value of the assets to the fair value of the assets, with the fair value generally determined based on the present value of the expected future cash flows associated with the assets. Although current and historical negative cash flows are indicators of impairment, the Company believes that the future cash flows it will receive from the long-lived assets and the potential success of the Company's research programs will exceed the assets' carrying value, and accordingly, the Company believes that no impairment of long-lived assets existed as of December 31, 2012 and 2013, and June 30, 2014 (unaudited).

(f) Concentration of credit risk and of significant customers:

Financial instruments that potentially subject the Company to significant concentrations of credit risk consist primarily of cash, cash equivalents, marketable securities, and accounts receivable. Cash and cash equivalents

XENON PHARMACEUTICALS INC.

Notes to Financial Statements
(Expressed in thousands of U.S. dollars except share and per share figures) (continued)

2. Significant Accounting Policies (continued):

are invested through banks and other financial institutions in the United States and Canada. Such deposits may be in excess of insured limits. The Company maintains cash and cash equivalents with various high credit quality and capitalized financial institutions.

Marketable securities are highly liquid investments with terms to maturity of greater than three months, and less than twelve months, when acquired, and include guaranteed investment certificates as well as government treasury bills and treasury notes. Marketable securities are invested through June 2015.

Accounts receivable are typically unsecured and are concentrated in the pharmaceutical industry due to the Company's multiple collaborations. Accordingly, the Company may be exposed to credit risk generally associated with pharmaceutical companies or specific to the collaboration agreements with its significant pharmaceutical collaborators. To date, the Company has not experienced any material losses related to its receivables.

Collaborators whose collaboration research and development revenue accounted for 10% or more of total revenues were as follows:

	YEAR ENDED DECEMBER 31,			SIX MONTHS ENDED
	2011	2012	2013	JUNE 30, 2014 (unaudited)
Genentech	$ —	$ 6,948	$12,876	$ 4,010
Merck	6,389	5,562	—	—
Teva	—	—	13,773	6,287

(g) Financial instruments and fair value:

Fair value

U.S. GAAP establishes a fair value hierarchy for inputs to be used to measure fair value of financial assets and liabilities. This hierarchy prioritizes the inputs to valuation techniques used to measure fair value into three levels: Level 1 (highest priority), Level 2, and Level 3 (lowest priority).

- *Level 1*—Unadjusted quoted prices in active markets for identical assets or liabilities that the Company has the ability to access at the balance sheet date.
- *Level 2*—Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly. Level 2 inputs include quoted prices for similar assets and liabilities in active markets, quoted prices for identical or similar assets or liabilities in markets that are not active, inputs other than quoted prices that are observable for the asset or liability (i.e., interest rates, yield curves, etc.), and inputs that are derived principally from or corroborated by observable market data by correlation or other means (market corroborated inputs).
- *Level 3*—Inputs are unobservable and reflect the Company's assumptions as to what market participants would use in pricing the asset or liability. The Company develops these inputs based on the best information available.

Cash equivalents are reflected in the accompanying financial statements at fair value using Level 1. The carrying amount of accounts receivables, accounts payable and accrued expenses and note payable approximates fair value due to the nature and short-term of those instruments.

Marketable securities are highly liquid investments with terms to maturity of greater than three months when acquired. Marketable securities have varying maturities of less than 12 months, are classified as available-for-sale investments and are measured at their fair values under Level 1 of the fair value hierarchy with unrealized holding gains or losses reported in other comprehensive income (loss).

XENON PHARMACEUTICALS INC.

Notes to Financial Statements

(Expressed in thousands of U.S. dollars except share and per share figures) (continued)

2. Significant Accounting Policies (continued):

(h) Revenue recognition:

The Company recognizes revenue when all of the following criteria are met: (i) persuasive evidence of an arrangement exists; (ii) delivery has occurred or services have been rendered; (iii) the Company's price to the collaborator is fixed or determinable; and (iv) collectability is reasonably assured.

The Company generates revenue primarily through collaboration agreements.

Under these collaboration agreements, the Company is eligible to receive non-refundable upfront payments, funding for research and development services, milestone payments, other contingent payments and royalties. In assessing the appropriate revenue recognition related to a collaboration agreement, the Company first determines whether an arrangement includes multiple elements, such as the delivery of intellectual property rights and research and development services. Upfront payments are recorded as deferred revenue in the balance sheet and are recognized as collaboration revenue over the estimated period of research performance that is consistent with the terms of the research and development obligations contained in the collaboration agreement. The Company periodically reviews the estimated period of performance based on the progress made under each arrangement.

The Company recognizes funding related to full-time equivalent staffing funded through collaboration agreements as revenue on a gross basis as it performs or delivers such related services in accordance with the agreement terms, provided that it will receive payment for such services upon standard payment terms.

In January 2011, the Company adopted new authoritative guidance on revenue recognition for multiple element arrangements, Financial Accounting Standards Board ("FASB") Accounting Standards Update ("ASU") No. 2009-13, *Multiple-Deliverable Revenue Arrangements* ("ASU 2009-13"). This guidance, which applies to multiple element arrangements entered into or materially modified on or after January 1, 2011, amends the criteria for separating and allocating consideration in a multiple element arrangement by modifying the fair value requirements for revenue recognition and eliminating the use of the residual method. The estimated fair value of deliverables under the arrangement may be derived using a best estimate of selling price if vendor-specific objective evidence and third-party evidence are not available.

Deliverables under the arrangement will be separate units of accounting provided that a delivered item has value to the customer on a stand-alone basis and if the arrangement does not include a general right of return relative to the delivered item and delivery or performance of the undelivered items is considered probably and substantially in the control of the vendor. The update also provided new guidance regarding how to apply the standard to arrangements that are materially modified following adoption of the update. The potential future impact of the adoption of this update will depend on the nature of any new agreements entered into or material modifications to existing arrangements.

In January 2012, the Company also adopted the guidance FASB ASU No. 2010-17, *Milestones Method of Revenue Recognition* ("ASU 2010-17") that permits the recognition of revenue contingent upon its achievement of a milestone in its entirety, in the period the milestone is achieved, only if the milestone meets certain criteria and is considered to be substantive.

The Company makes judgments which affect the periods over which the Company recognized revenue, including modifying such periods based on any amendments to its collaboration agreements.

(i) Research and development costs:

Research and development costs are expensed in the period in which they are incurred.

XENON PHARMACEUTICALS INC.

Notes to Financial Statements

(Expressed in thousands of U.S. dollars except share and per share figures) (continued)

2. Significant Accounting Policies (continued):

(j) Clinical trial expenses:

Clinical trial expenses are a component of research and development costs and include fees paid to contract research organizations, investigators and other vendors who conduct certain product development activities on behalf of the Company. The amount of clinical trial expenses recognized in a period related to service agreements is based on estimates of the work performed using an accrual basis of accounting. These estimates are based on patient enrollment, services provided and goods delivered, contractual terms and experience with similar contracts. The Company monitors these factors and adjusts the estimates accordingly. Prepaid expenses or accrued liabilities are adjusted if payments to service providers differ from estimates of the amount of service completed in a given period.

(k) Share-based compensation:

The Company grants stock options to employees, directors and consultants pursuant to a stock option plan described in Note 12. Compensation expense is recorded for stock options issued to employees and non-employees using the fair value method with a corresponding increase in additional paid-in capital. Any consideration received on exercise of stock options and the purchase of shares is credited to share capital.

Under the fair value based method, share-based payments to non-employees are measured at the fair value of the equity instruments issued, and the awards are periodically re-measured during the vesting period as the options are earned. Any changes therein are recognized over the period and in the same manner as if the Company had paid cash instead of paying with or using equity instruments. The fair value of stock-based awards to employees is measured at the grant date and amortized over the vesting period.

Stock options issued to employees are recorded at the fair value of stock options determined at the date of the grant using the Black-Scholes option-pricing model and a single option award approach and are expensed on a straight-line basis over the vesting period of the options. In determining the expense, the Company deducts the number of options that are expected to be forfeited at the time of a grant and revises this estimate, if necessary, in subsequent years if actual forfeitures differ from those estimated. Any amounts paid by employees on exercise of the stock options and subsequent purchase of shares are credited to share capital.

(l) Net income (loss) per share:

The Company follows the two-class method when computing net income (loss) per share as the Company has issued shares that meet the definition of participating securities. The two-class method determines net income (loss) per share for each class of common and participating securities according to dividends declared or accumulated and participation rights in undistributed earnings. The two-class method requires income available to common shareholders for the period to be allocated between common and participating securities based upon their respective rights to receive dividends as if all income for the period had been distributed.

The Company’s redeemable convertible preferred shares contractually entitle the holders of such shares to participate in dividends, but do not contractually require the holders of such shares to participate in losses of the Company. Accordingly, in periods in which the Company reports a net loss or a net loss attributable to common shareholders resulting from preferred share dividends or accretion, net losses are not allocated to participating securities. The Company reported net losses attributable to common shareholders for each of the years ended December 31, 2011 and 2012, and net income attributable to common shareholders for the year ended December 31, 2013. No net income was attributable to common shareholders for the six months ended June 30, 2013 and 2014 (unaudited).

Basic net income (loss) per share attributable to common shareholders is computed by dividing the net income (loss) attributable to common shareholders by the weighted-average number of common shares outstanding for the period. Diluted net income (loss) attributable to common shareholders is computed by adjusting net income (loss) attributable to common shareholders to reallocate undistributed earnings based on the potential impact of dilutive securities, including outstanding stock options and outstanding subscription rights. Diluted net income (loss) per

XENON PHARMACEUTICALS INC.

Notes to Financial Statements

(Expressed in thousands of U.S. dollars except share and per share figures) (continued)

2. Significant Accounting Policies (continued):

share attributable to common shareholders is computed by dividing the diluted net income (loss) attributable to common shareholders by the weighted-average number of common shares outstanding for the period, including potential dilutive common shares assuming the dilutive effect of outstanding stock options and outstanding subscription rights. For periods in which the Company has reported net losses, diluted net loss per share attributable to common shareholders is the same as basic net loss per share attributable to common shareholders, since dilutive common shares are not assumed to have been issued if their effect is anti-dilutive. For the year ended December 31, 2013, potential common shares of 207,000 were excluded from the calculation of net income per share attributable to common shareholders because their inclusion would be anti-dilutive. As the Company reported net losses attributable to common shareholders for each of the years ended December 31, 2011 and 2012 and no net income was attributable to common shareholders for the six months ended June 30, 2013 and 2014 (unaudited), all stock options were anti-dilutive and were excluded from the diluted weighted average shares for these periods.

(m) Foreign currency translation:

The Company's functional currency is the Canadian dollar and the Company's reporting currency is the U.S. dollar. The Company initially records foreign currency transactions using the exchange rates prevailing at the dates of the transactions. At the balance sheet date, results of operations and cash flows are translated into the functional currency at average exchange rates during the period, and monetary assets and liabilities are translated at end of period exchange rates. Non-monetary assets and liabilities and equity transactions are translated at historical exchange rates. The effects of exchange rate fluctuations on translating foreign currency monetary assets and liabilities into Canadian dollars are included in the statement of operations as foreign exchange gain (loss).

At the balance sheet date, results of operations and cash flows are translated into the U.S. dollar reporting currency at average exchange rates during the period, and assets and liabilities are translated at end of period exchange rates, except for equity transactions, which are translated at historical exchange rates. The effects of exchange rate fluctuations on translating functional currency assets and liabilities into U.S. dollars are accumulated as a separate component in other accumulated comprehensive income (loss) as cumulative translation adjustment.

(n) Income taxes:

Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and net operating loss and credit carryforwards. Deferred tax assets and liabilities are measured at rates expected to apply to taxable income in the years in which those temporary differences and carryforwards are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in the statement of operations in the period that includes the enactment date. A valuation allowance is recorded when it is not more likely than not that all or a portion of the net deferred tax assets will be realized.

(o) Deferred tenant inducements:

Deferred tenant inducements, which include leasehold improvements paid for by the landlord and free rent, are recorded as liabilities on the balance sheet and recognized as a reduction of rent expense on a straight-line basis over the term of the lease.

(p) Deferred financing fees:

Deferred financing fees, which primarily consist of direct incremental legal and accounting fees relating to the potential IPO, are capitalized. The deferred financing fees will be offset against IPO proceeds upon the consummation of the offering. In the event the offering is terminated, deferred financing fees will be expensed. At December 31, 2013 and at June 30, 2014 (unaudited), $2,739 and $3,480, respectively, were capitalized and deferred. No amounts were capitalized and deferred as of December 31, 2012.

(q) Comparative figures:

Certain comparative figures have been reclassified to conform with the financial statement presentation adopted for the current period.

XENON PHARMACEUTICALS INC.

Notes to Financial Statements

(Expressed in thousands of U.S. dollars except share and per share figures) (continued)

3. Changes in significant accounting policies:

In July 2013, the FASB issued amendments on income tax matters to include explicit guidance on the financial statement presentation of an unrecognized tax benefit when a net operating loss carryforward, a similar tax loss, or a tax credit carryforward exists. The amendments clarify that an unrecognized tax benefit, or a portion of an unrecognized tax benefit, should be presented in the financial statements as a reduction to a deferred tax asset for a net operating loss carryforward, a similar tax loss, or a tax credit carryforward, when the uncertain tax position would reduce the net operating loss carryforward, a similar tax loss, or a tax credit carryforward under the tax law of the applicable jurisdiction, and when the entity intends to use the deferred tax asset for that purpose. These amendments were effective prospectively for fiscal years beginning after December 15, 2013. On January 1, 2014, the Company adopted these amendments. The adoption of these amendments did not have a material impact on the Company's financial position or results of operations.

4. Future changes in accounting policies:

In May 2014, the FASB and International Accounting Standards Board ("IASB") issued amendments to develop a common revenue standard for U.S. GAAP and International Financial Reporting Standards ("IFRS"). These amendments provide the following: a) remove inconsistencies and weaknesses in revenue requirements, b) provide a more robust framework for addressing revenue issues, c) improve comparability of revenue recognition practices across entities, industries, jurisdictions, and capital markets, d) provide more useful information to users of financial statements through improved disclosure requirements, and e) simplify the preparation of financial statements by reducing the number of requirements to which an entity must refer. These amendments will be effective prospectively for annual reporting periods beginning after December 15, 2017, and interim reporting periods within annual reporting periods beginning after December 15, 2018. The Company is in the process of evaluating the impact of the adoption of the amendments on the Company's financial position, results of operations and cash flows.

5. Fair Value of Financial Instruments:

In accordance with the fair value hierarchy described in Note 2(g), the following tables show the fair value of the Company's financial assets that are required to be measured at fair value:

	FAIR VALUE MEASUREMENTS AT DECEMBER 31, 2012			
	TOTAL	LEVEL 1	LEVEL 2	LEVEL 3
Assets				
Cash and cash equivalents	$ 60,162	$ 60,162	$ —	$ —
Total	$ 60,162	$ 60,162	$ —	$ —

	FAIR VALUE MEASUREMENTS AT DECEMBER 31, 2013			
	TOTAL	LEVEL 1	LEVEL 2	LEVEL 3
Assets				
Cash and cash equivalents	$ 37,950	$ 37,950	$ —	$ —
Marketable securities	11,326	11,326	—	—
Total	$ 49,276	$ 49,276	$ —	$ —

XENON PHARMACEUTICALS INC.

Notes to Financial Statements
(Expressed in thousands of U.S. dollars except share and per share figures) (continued)

5. Fair Value of Financial Instruments (continued):

	FAIR VALUE MEASUREMENTS AT JUNE 30, 2014 (unaudited)			
	TOTAL	LEVEL 1	LEVEL 2	LEVEL 3
Assets				
Cash and cash equivalents	$ 35,087	$ 35,087	$ —	$ —
Marketable securities	9,623	9,623	—	—
Total	$ 44,710	$ 44,710	$ —	$ —

The Company's Level 1 assets include marketable securities with quoted prices in active markets.

6. Property, Plant and Equipment:

Property, plant and equipment consisted of the following:

	DECEMBER 31, 2012	DECEMBER 31, 2013	JUNE 30, 2014 (unaudited)
Research equipment	$ 7,354	$ 6,356	$ 6,703
Office furniture and equipment	1,144	1,069	1,066
Computer equipment	1,915	1,780	1,771
Leasehold improvements	7,296	6,825	6,806
Less: accumulated depreciation and amortization	(15,107)	(14,151)	(14,322)
Total	$ 2,602	$ 1,879	$ 2,024

During the year ended December 31, 2012, the Company wrote off leasehold improvements with a net book value of $1,030 in connection with a lease extension and modification agreement made effective April 1, 2012.

Depreciation expense was $1,132, $786 and $705 for the years ended December 31, 2011, 2012 and 2013, respectively, and was $372 and $350 for the six months ended June 30, 2013 and 2014 (unaudited), respectively.

7. Accounts Payable and Accrued Expenses:

Accounts payable and accrued expenses consisted of the following:

	DECEMBER 31, 2012	DECEMBER 31, 2013	JUNE 30, 2014 (unaudited)
Trade payables	$ 821	$ 391	$ 620
Employee compensation, benefits, and related accruals	1,116	520	626
Consulting and contracted research	107	412	66
Professional fees	93	694	562
Other	44	266	275
Total	$2,181	$2,283	$ 2,149

XENON PHARMACEUTICALS INC.

Notes to Financial Statements

(Expressed in thousands of U.S. dollars except share and per share figures) (continued)

8. Deferred Revenue:

The Company receives upfront payments under various research and collaboration agreements. In assessing the appropriate revenue recognition related to a collaboration agreement, the Company first determines whether an arrangement includes multiple elements, such as the delivery of intellectual property rights and research and development services. Upfront payments are recorded as deferred revenue in the balance sheet and are recognized as collaboration revenue over the estimated period of the research commitment that is consistent with the terms of the research and development obligations contained in the collaboration agreement. The Company periodically reviews the estimated period of performance based on the progress made under each arrangement. The full amount as of December 31, 2013 of $27,806 is expected to be realized as revenue as follows:

YEAR ENDING DECEMBER 31,	
2014	$ 15,920
2015	11,886
Deferred revenue	$ 27,806

9. Note Payable:

In November 2010, the Company entered into a collaboration and licensing agreement with Isis Pharmaceuticals, Inc. ("Isis") to discover, develop and commercialize antisense drugs that target the hepcidin-hemojuvelin pathway. Upon signing the agreement, the Company issued a convertible promissory note to Isis as payment of an upfront fee of $1,500. The note accrued interest at 5% per annum, compounded annually with interest payable at the time the note became due and payable. At the option of the Company, the note was convertible into equity securities upon occurrence of certain events specified in the note. As the number of equity securities that the note payable was potentially convertible into was variable until the time of conversion, the note was classified as a financial liability and measured at its amortized cost.

At December 31, 2012, the note payable balance was comprised of the principal of $1,500 and accrued interest of $165.

In June 2013, the Company repaid the promissory note in full in cash (together with accrued interest) for $1,701 in conjunction with the exercise of an option to exclusively license certain product rights under the collaboration with Isis.

10. Redeemable Convertible Preferred Shares:

The rights and preferences of the shares of Series A, Series B and Series E convertible preferred shares (collectively, the "Redeemable Convertible Preferred Shares") are as follows:

Dividends—Holders of Series A, Series B and Series E preferred shares are entitled to receive non-cumulative cash dividends, in preference to any dividend payable on the common shares, at a rate of 8% per annum of the issue price of the preferred share when and as declared by the Board, but only if any dividends are declared on the common shares. In addition, holders of the Series A, Series B and Series E preferred shares will be entitled to receive, when and as declared by the Board, dividends in an amount equal to any dividend per common share declared by the Board on the common shares multiplied by the number of common shares that would be issued in exchange for the Series A, Series B and Series E preferred shares upon conversion.

Conversion—Each Series A, Series B, and Series E preferred share is convertible at any time at the option of the holder into common shares on a 1:1 basis, subject to certain adjustments for share splits, consolidations, share dividends, and, as applicable, following certain capital reorganizations or mergers or acquisitions with another

XENON PHARMACEUTICALS INC.

Notes to Financial Statements

(Expressed in thousands of U.S. dollars except share and per share figures) (continued)

10. Redeemable Convertible Preferred Shares (continued):

company as well as certain adjustments based on whether any common shares have been issued during certain specified time periods at a price per share which is lower than certain threshold amounts as set forth in the articles. Each of the Series A, Series B and Series E preferred shares will automatically convert into common shares in connection with an IPO satisfying certain threshold requirements. The conversion rights associated with each of the Company's Series E preferred shares will increase by 20% if the initial public offering price is below a certain price per share.

As part of a financing of additional Series E preferred shares in 2006, those Series E preferred shares held by shareholders prior to the March 31, 2006 financing received additional conversion rights. Upon 1:1 conversion of such Series E preferred shares to common shares, these conversion rights operate to allow such shareholders to receive an additional number of common shares (such additional number which is equal to the number of conversion rights each holds). As of both December 31, 2013 and June 30, 2014 (unaudited), a total of 1,592,215 conversion rights are attached to the Company's Series E preferred shares.

Voting—At general meetings of the shareholders, each preferred shareholder is entitled to the number of votes that such shareholder would be entitled to if such preferred shares were converted to common shares. At meetings of the preferred class of shareholders or meetings of any series of the preferred class, each preferred shareholder is entitled to one vote.

Liquidation Preference—Upon the liquidation, dissolution, reorganization or winding-up of the Company, holders of preferred shares are entitled to receive, before any distribution or payment on the common shares, an amount equal to the amount such shareholder paid for such preferred shares, plus all declared, but unpaid, dividends (the "liquidation preference"). In cases where the liquidation preference applied, if there were insufficient funds to pay the full preference value to all holders, then, as a group, the holders of the preferred shares would be paid, ratably. To the extent there were excess assets to distribute, the holders of the preferred shares are entitled to a further distribution ratably along with the common shareholders. Dividends are payable only if and when declared. The Company has not declared any dividends through both December 31, 2013 and June 30, 2014 (unaudited).

Redemption—There are certain redemption rights afforded the Series A, Series B and Series E preferred shares. Such preferred shares have redemption rights in the event of a change of control event such as a merger, acquisition or consolidation of the Company, or in the event of a sale, lease or other disposition of all or substantially all of the assets of the Company. Such events are not solely within the control of the Company, and therefore, the redeemable convertible preferred shares are classified outside of shareholders' deficit.

Retraction—The Company has the right to redeem Series A preferred shares at a redemption price equal to the greater of the fair market value of such Series A preferred share and the amount paid by such shareholder together with an amount equal to the cumulative annual yield calculated since the date of issuance of such shares at the rate of 8% per annum on the amount paid up thereon.

The Company has also authorized 4,620 Series C preferred shares and 9,376 Series D preferred shares. No Series C or D preferred shares are outstanding.

11. Subscription Rights:

At December 31, 2013, the Company had 64,952 (December 31, 2012—54,390) subscription rights outstanding to Genome BC (See Note 14(f)). During the year ended December 31, 2013, 27,226 (2012—31,455, 2011—3,140) subscription rights were converted by Genome BC to an equal number of common shares.

During the six months ended June 30, 2014, no additional subscription rights were issued to Genome BC and 13,142 subscription rights were converted to an equal number of common shares, thus leaving 51,810 subscription rights outstanding to Genome BC as of June 30, 2014 (unaudited).

XENON PHARMACEUTICALS INC.

Notes to Financial Statements

(Expressed in thousands of U.S. dollars except share and per share figures) (continued)

11. Subscription Rights (continued):

In exchange for research funding provided by Genome BC, the Company agreed to provide Genome BC with subscription rights on a quarterly basis (in arrears) equal to one-half of the Genome BC funding amount divided by the greatest of the following: (i) CAD$10.64; (ii) the converted U.S. dollar share price; and (iii) the most recent issue price of common shares by the Company. The subscription rights are automatically exchangeable into common shares of the Company on a 1:1 basis on a date three years after the subscription right is issued without additional cash consideration being paid by Genome BC. In the event of an IPO, sale or liquidation of the Company, the remaining subscription rights would be automatically exchanged for common shares immediately prior to such event.

12. Stock Option Plan:

The Company has a stock option incentive plan (the "Plan") that provides for the Company to grant options for the purchase of common shares to directors, officers, employees and service providers, with vesting occurring on a graduated basis over a four-year period or less. Options may be exercised over a term of ten years.

As of December 31, 2012, the Company was authorized to grant up to 6,531,977 options under the Plan. In January 2013, the Plan was amended and restated to increase the maximum number of options under the Plan to 7,373,338. In November 2013, the Plan was further amended and restated to increase the maximum number of options under the Plan to 7,800,000. The Plan is administered by the Company's board of directors and exercise prices, vesting and other restrictions are all determined at their discretion.

Summary of stock option activity is as follows:

	NUMBER OF OPTIONS	WEIGHTED-AVERAGE EXERCISE PRICE		WEIGHTED-AVERAGE REMAINING CONTRACTUAL LIFE (YEARS)	AGGREGATE INTRINSIC VALUE U.S.$
		CAD$	U.S.$		
Outstanding, January 1, 2012	5,149,221	0.88	0.87	6.07	
Granted	729,500	0.75	0.75		
Forfeited and expired	(394,515)	1.08	1.08		
Outstanding, December 31, 2012	5,484,206	0.85	0.86	5.81	
Granted	1,421,150	0.77	0.75		
Exercised	(40,500)	1.25	1.21		37
Forfeited and expired	(385,993)	1.01	0.98		
Outstanding, December 31, 2013	6,478,863	0.82	0.80	5.80	8,300
Granted	766,000	2.22	2.08		
Exercised	(3,750)	1.25	1.17		4
Forfeited and expired	(227,535)	1.26	1.18		
Outstanding, June 30, 2014 (unaudited)	7,013,578	0.96	0.90	6.05	8,617
Exercisable as of June 30, 2014 (unaudited)	5,027,758	0.80	0.75	4.97	6,922

XENON PHARMACEUTICALS INC.

Notes to Financial Statements

(Expressed in thousands of U.S. dollars except share and per share figures) (continued)

12. Stock Option Plan (continued):

The following table summarizes the stock options outstanding and exercisable at December 31, 2012 and 2013, and June 30, 2014 (unaudited):

	OPTIONS OUTSTANDING				OPTIONS EXERCISABLE		
			WEIGHTED-AVERAGE EXERCISE PRICE			WEIGHTED-AVERAGE EXERCISE PRICE	
EXERCISE PRICES CAD$	NUMBER OF OPTIONS	WEIGHTED-AVERAGE REMAINING OPTION LIFE (YEARS)	CAD$	U.S.$	NUMBER OF OPTIONS	CAD$	U.S.$
December 31, 2012							
0.55	68,250	9.76	0.55	0.55	—	—	—
0.77	4,404,056	6.76	0.77	0.77	3,128,294	0.77	0.77
1.25	1,011,900	1.45	1.25	1.26	1,011,900	1.25	1.26
	5,484,206	5.81	0.85	0.86	4,140,194	0.88	0.88
December 31, 2013							
0.55	1,230,900	9.02	0.55	0.53	25,337	0.55	0.53
0.77	4,287,713	5.79	0.77	0.75	3,813,477	0.77	0.75
1.25	753,250	1.11	1.25	1.21	753,250	1.25	1.21
2.01	207,000	9.59	2.01	1.95	—	—	—
	6,478,863	5.80	0.82	0.80	4,592,064	0.85	0.83
June 30, 2014 (unaudited)							
0.55	1,229,115	8.54	0.55	0.52	489,308	0.55	0.52
0.77	4,282,963	5.24	0.77	0.72	3,989,509	0.77	0.72
1.25	534,500	0.68	1.25	1.17	534,500	1.25	1.17
2.01	207,000	9.09	2.01	1.88	—	—	—
2.22	760,000	9.54	2.22	2.08	14,441	2.22	2.08
	7,013,578	6.05	0.96	0.90	5,027,758	0.80	0.75

A summary of the Company's non-vested stock option activity and related information for the year ended December 31, 2013 and period ended June 30, 2014 (unaudited) is as follows:

		WEIGHTED AVERAGE GRANT DATE FAIR VALUE	
	NUMBER OF OPTIONS	CAD$	U.S.$
Non-vested, January 1, 2013	1,344,012	0.51	0.51
Granted	1,421,150	0.88	0.85
Vested	(749,364)	0.53	0.52
Forfeited and cancelled	(129,000)	0.49	0.47
Non-vested, December 31, 2013	1,886,798	0.78	0.73
Granted	766,000	1.48	1.40
Vested	(654,443)	0.65	0.59
Forfeited and cancelled	(12,535)	1.00	0.91
Non-vested, June 30, 2014 (unaudited)	1,985,820	1.09	1.02

XENON PHARMACEUTICALS INC.

Notes to Financial Statements

(Expressed in thousands of U.S. dollars except share and per share figures) (continued)

12. Stock Option Plan (continued):

The fair value of each option issued to employees and non-employees is estimated using the Black-Scholes option-pricing model with the following weighted-average assumptions:

	YEARS ENDED DECEMBER 31,			SIX MONTHS ENDED JUNE 30,	
	2011	2012	2013	2013	2014
				(unaudited)	
Average risk-free interest rate	2.36%	1.14%	1.03%	1.03%	1.97%
Average expected term (in years)	6.2	6.2	6.2	6.2	6.2
Expected volatility	70%	70%	70%	70%	74%
Expected dividend yield	—	—	—	—	—
Estimated forfeiture rate	—	—	—	—	—

The weighted-average fair value of options granted during the six months ended June 30, 2013 and 2014 was $0.83 and $1.40 (unaudited), respectively, and the weighted-average fair value of options granted in 2013 was $0.88 (2012—$0.47, 2011—$0.49) per option.

As of June 30, 2014, the unrecognized stock-based compensation expense related to the non-vested stock options was $1,822 (unaudited) (December 31, 2013—$1,155, December 31, 2012—$633), which is expected to be recognized over a weighted-average period of 1.1 years (2013—2.5 years; 2012—2.2 years).

The aggregate fair value of vested options during the six months ended June 30, 2013 and 2014 was $1,095 and $1,751 (unaudited), respectively.

The Company uses the “simplified method” to determine the expected term of options. Under this method, the expected term represents the average of the vesting period and the contractual term.

The expected volatility of share options was estimated based on a historical volatility analysis of peers that were similar to the Company with respect to industry, stage of life cycle, size, and financial leverage. The risk-free interest rate of the options is based on the U.S. Treasury yield curve in effect at the date of grant for a term similar to the expected term of the option.

Stock-based compensation expense is classified in the statements of operations as follows:

	YEAR ENDED DECEMBER 31,			SIX MONTHS ENDED JUNE 30,	
	2011	2012	2013	2013	2014
				(unaudited)	
Research and development	$ 145	$ 112	$ 147	$ 70	$ 96
General and administrative	290	294	428	203	277
Total	$ 435	$ 406	$ 575	$ 273	$ 373

13. Financial Risks:

(a) Foreign Currency Exchange Risk:

At December 31, 2013 and June 30, 2014, the Company had U.S. dollar denominated cash and cash equivalents of $6,365 (December 31, 2012—$51,100) and $8,436, respectively and Canadian denominated cash, cash equivalents and marketable securities of CAD$45,641 (December 31, 2012—CAD$9,000) and $38,703, respectively.

XENON PHARMACEUTICALS INC.

Notes to Financial Statements

(Expressed in thousands of U.S. dollars except share and per share figures) (continued)

13. Financial Risks (continued):

The Company faces foreign currency exchange rate risk in part, as a result of entering into transactions denominated in currencies other than Canadian dollars, particularly those denominated in U.S. dollars and Euros. The Company also holds non-Canadian dollar denominated cash, accounts receivable and accounts payable, which are primarily denominated in U.S. dollars.

Changes in foreign currency exchange rates can create significant foreign exchange gains or losses to the Company. The Company's current foreign currency risk is primarily with the U.S. dollar as a majority of its non-Canadian dollar denominated expenses are denominated in U.S. dollars. To limit the Company's exposure to volatility in currency markets, the Company maintains a natural currency hedge against fluctuations in currency exchange rates by estimating its anticipated expenses that will be denominated in currencies other than the Canadian dollar and then purchasing a corresponding amount of the relevant foreign currency at the current spot rate. The Company does not otherwise hedge its exposure and thus assumes the risk of future gains or losses on the amounts of foreign currency held. The impact of an adverse change in foreign exchange rates may be offset in the event the Company receives a milestone payment from a foreign partner.

(b) Interest Rate Risk:

At December 31, 2013 and June 30, 2014, the Company had cash and cash equivalents of $37,950 (December 31, 2012—$60,162) and $44,710, respectively, which consisted of bank deposits. At December 31, 2013, the Company had marketable securities of $11,326 (December 31, 2012—$0). The goals of the Company's investment policy are liquidity and capital preservation; the Company does not enter into investments for trading or speculative purposes and has not used any derivative financial instruments to manage its interest rate exposure. The Company believes that it does not have any material exposure to changes in the fair value of these assets as a result of changes in interest rates due to the short term nature of the Company's cash and cash equivalents. Declines in interest rates, however, would reduce future investment income. Such interest-earning instruments carry a degree of interest rate risk; however, historical fluctuations in interest income have not been significant. The Company had no outstanding debt as of December 31, 2013 and June 30, 2014 (unaudited).

14. Collaboration Agreements:

The Company has entered into a number of collaboration agreements with multiple deliverables under which it may have received non-refundable upfront payments. The Company generally recognizes revenue from upfront payments ratably over the term of its estimated period of performance of research under its collaboration agreements in the event that such arrangements represent a single unit of accounting.

The collaborations may also include contractual milestone payments, which relate to the achievement of pre-specified research, development, regulatory and commercialization events. The milestone events coincide with the progression of product candidates from research and development, to regulatory approval and through to commercialization. The process of successfully discovering a new product candidate, having it selected by the collaborator for development and having it approved and ultimately sold for a profit is highly uncertain. As such, the milestone payments that the Company may earn from its collaborators involve a significant degree of risk to achieve.

Research and development milestones in the Company's collaboration agreements may include the following types of events:

- completion of pre-clinical research and development work leading to selection of product candidates;
- initiation of Phase 1, Phase 2 or Phase 3 clinical trials; and
- achievement of certain other scientific or development events.

XENON PHARMACEUTICALS INC.

Notes to Financial Statements

(Expressed in thousands of U.S. dollars except share and per share figures) (continued)

14. Collaboration Agreements (continued):

Regulatory milestone payments may include the following types of events:

- filing of regulatory applications for marketing approval in the U.S., Europe or Japan, including Investigational New Drug (“IND”) applications and New Drug Applications (“NDA”); and
- marketing approval in a major market, such as the U.S., Europe or Japan.

Commercialization milestone payments may include payments triggered by annual product sales that achieve pre-specified thresholds.

(a) uniQure Biopharma B.V. (“uniQure”) sublicense and research agreement:

Effective August 2000, the Company entered into a sublicense and research agreement with uniQure (formerly Amsterdam Molecular Therapeutics), pursuant to which the Company granted to uniQure an exclusive, worldwide sublicense under certain intellectual property controlled by the Company to develop and commercialize technology and compounds related to a certain variant of lipoprotein lipase (“LPL”). Under its sublicense and research agreement with uniQure, the Company collaborated with uniQure and the University of British Columbia (“UBC”) on pre-clinical activities, and thereafter uniQure developed an LPL gene therapy product, Glybera, which contains the LPL variant. Glybera was approved in the European Union (“EU”) in October 2012 to treat lipoprotein lipase deficiency (“LPLD”) in patients with severe or multiple pancreatitis attacks, despite dietary fat restrictions. uniQure conducted the clinical trials and is responsible for the commercialization of Glybera. During the year ended December 31, 2013, the Company received milestone payments of CAD$531. No such milestone payments have been recognized in the six months ended June 30, 2014 (unaudited).

Under the terms of the agreement, the Company is eligible to receive certain additional milestone payments of less than CAD$1,000 for Glybera and for each subsequent product, if any, developed pursuant to the agreement with uniQure. The Company, in turn, has certain payment obligations to its licensor, UBC, based on amounts received from uniQure or otherwise based on the exploitation of the licensed intellectual property. The Company believes that all potential milestone payments under this agreement are substantive and at risk at the inception of this agreement, and, as such, expects that future milestone payments will be recognized as revenue in the period that each milestone is achieved.

The Company is also eligible to receive mid single-digit royalties on net sales of the licensed products, for sales made by uniQure and its affiliates. The royalty rates for sales made by uniQure and its affiliates are reduced to a low single-digit when the licensed patents expire.

In July 2013, uniQure announced that it entered into a partnership with Chiesi Farmaceutici S.p.A. (“Chiesi”) for the commercialization of Glybera in the European Union and more than a dozen other countries including Brazil, China, Mexico and Russia. With respect to uniQure’s sublicense to Chiesi, the Company is eligible to receive a percentage in the low twenties of all non-royalty compensation relating to the licensed technology or products that uniQure receives from Chiesi (including, for example, upfront payments and milestone payments), a percentage in the low twenties of any royalties that uniQure receives from Chiesi based on sales of technology or products covered by the licensed patents, plus a mid single-digit percentage of certain further royalties that uniQure receives from Chiesi based on sales of the Company’s licensed technology or products after the expiration of all licensed patents covering the product. If uniQure grants a sublicense to a third party other than to Chiesi, then the Company is eligible to receive a percentage in the low twenties of all non-royalty compensation relating to the licensed technology or products that uniQure receives from such sublicensee (for example, upfront payments and milestone payments) plus a percentage in the low twenties of any royalties that uniQure receives from such sublicensee based on sales of technology or products covered by the licensed patents.

Pursuant to the terms of the Company’s agreement with UBC, the Company must pay to UBC a single-digit percentage of amounts the Company receives from sales of Glybera.

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(Expressed in thousands of U.S. dollars except share and per share figures) (continued)

14. Collaboration Agreements (continued):

(b) Teva Pharmaceutical Industries Ltd. ("Teva") collaborative development and license agreement:

In December 2012, the Company entered into a collaborative development and license agreement with Teva, through its subsidiary, Ivax International GmbH, pursuant to which the Company granted Teva an exclusive worldwide license to develop and commercialize certain products, including TV-45070 (formerly XEN402).

Under the terms of the agreement, Teva paid the Company an upfront fee of $41,000. The Company is collaborating with Teva to further develop TV-45070, and Teva is funding all development costs with respect to the licensed products. Teva is providing funding to the Company for certain of the Company's full-time equivalents ("FTEs") performing the research collaboration plan. The Company identified several deliverables under the agreement with Teva, including exclusive licenses to compounds and non-exclusive licenses to companion diagnostic products, a commitment to participate in a joint steering committee and research and development services to be performed by the Company on behalf of Teva. The Company concluded that the licenses did not have stand-alone value to Teva without the Company's technical expertise and joint steering committee participation during the initial three-year period.

Therefore, the Company has determined that the various deliverables under this agreement should be considered as a single unit of accounting. As such the Company determined that the $41,000 upfront payment should be recognized as revenue ratably over the expected period of performance, being the three-year period ending December 31, 2015.

In addition, the Company is eligible to receive potential milestone payments totaling up to $335,000, comprised of a $20,000 clinical milestone payment, up to $285,000 in regulatory milestone payments, and a $30,000 sales-based milestone payment. If TV-45070 is approved, the Company is also eligible to receive royalties in the low teens to low twenties on net sales of licensed products for the timeframe that such products are covered by the licensed patents and in certain other instances. The Company believes that potential milestone payments for development and regulatory milestones under this agreement are substantive and at risk at the inception of this agreement, and, as such, expects that these future milestone payments will be recognized as revenue in the period that each milestone is achieved. The Company believes that the potential sales-based milestone payments under this agreement are not substantive as the Company does not expect to contribute effort to their achievement and expects such sales-based milestones will generally be achieved after the period of substantial involvement under the collaboration. Therefore, the Company expects that future sales-based contingent consideration milestone payments will be recognized as revenue when such milestones are achieved, assuming all other revenue recognition criteria are met. As of June 30, 2014, no such milestone payments have been recognized (unaudited).

The Company has an option to a 20% to 30% co-promotion interest for products incorporating TV-45070 in the U.S. The Company's exercise of this option is subject to meeting objective financial conditions, staffing requirements and compliance standards to be determined in Teva's reasonable discretion in accordance with standard industry practice. The Company's co-promotion option is exercisable upon the filing of the first NDA for a TV-45070 product with the FDA, and the Company will be obligated to pay an opt-in fee to Teva, which is calculated by multiplying the Company's co-promotion interest (as a percentage) by the amount of certain milestones paid or payable by Teva, to which is added certain past and future development costs incurred by Teva with respect to the product for the U.S. Such opt-in fee is payable as a reduction to the milestone payments or the Company's share of operating profits that Teva would otherwise owe to the Company, or a combination of the two. If the Company exercises this option, the Company will be eligible to receive, in lieu of royalties with respect to such product sales in the U.S., a percentage share (equal to the Company's co-promotion interest) of operating profits from such product sales in the U.S.

Pursuant to the terms of the agreement, the Company has the right to require Teva, upon written notice, to purchase the Company's common shares issued in the proposed IPO if Teva has commenced a Phase 2b clinical trial of any

14. Collaboration Agreements (continued):

licensed product under the agreement and if certain minimum price per common share and gross proceed thresholds are met in connection with the proposed IPO. The number of common shares that Teva would be required to purchase in the proposed IPO upon receipt of such notice would equal to the lesser of:

- $20,000 divided by the initial public offering price of the Company's common shares in the proposed IPO, if the proposed IPO occurs on or after the date Teva commences a Phase 3 clinical trial of any licensed product;
- $10,000 divided by the initial public offering price of the Company's common shares in the proposed IPO, if the proposed IPO occurs prior to the date Teva commences a Phase 3 clinical trial of any licensed product;
- 19% of the Company's issued and outstanding shares after giving effect to the common shares to be issued in the proposed IPO; and
- a number of common shares specified by the Company in a written notice to Teva.

Teva may terminate the agreement upon 60 days advanced written notice to the Company after at least three Phase 2 (or later stage) clinical studies have been completed or in the event that safety or efficacy issues arise in the development of the licensed products. Either party may terminate the agreement in the event of the other's material breach which remains uncured for 90 business days. In certain termination circumstances, the Company receives licenses to Teva intellectual property relating to TV-45070 clinical development and regulatory filings. If patents within such Teva intellectual property cover the TV-45070 product, then Teva is eligible to receive royalties from the Company based on a percentage of net product sales, within the mid single-digit range.

Pursuant to the terms of the Company's agreement with the Memorial University of Newfoundland, the Company must pay to the Memorial University of Newfoundland certain milestone payments, a single-digit percentage of net sales for pain products the Company sells directly and a single-digit percentage of royalties received for sales of pain products by the Company's third party licensees, such as under the Teva and Genentech agreements.

(c) Genentech Inc. ("Genentech") collaborative research and license agreement:

In December 2011, the Company entered into a collaborative research and license agreement with Genentech and its affiliate, F. Hoffman-La Roche Ltd. ("Roche") to discover and develop small and large molecules that selectively inhibit the Nav1.7 sodium channel and companion diagnostics for the potential treatment of pain. Pursuant to this agreement, the Company granted Genentech a worldwide exclusive license to develop and commercialize compounds directed to Nav1.7 and products incorporating such compounds for all uses. The Company also granted Genentech a worldwide non-exclusive license to diagnostic products for the purpose of developing or commercializing such compounds.

Under the terms of the agreement, Genentech paid the Company an upfront fee of $10,000 and a $5,000 milestone payment for the selection of GDC-0276 for development. Genentech is providing funding to the Company for certain of the Company's FTEs performing the research collaboration plan. The Company identified several deliverables under the agreement with Genentech, including exclusive licenses to compounds and non-exclusive licenses to diagnostic products, a commitment to participate in a joint steering committee and research and development services to be performed by the Company on behalf of Genentech. The Company concluded that the licenses did not have stand-alone value to Genentech without the Company's technical expertise and joint steering committee participation during the initial three year period. Therefore, the Company has determined that the various deliverables should be considered as a single unit of accounting. As such the Company determined that the $10,000 upfront payment should be recognized as revenue ratably over the expected period of performance, being the three-year period ending December 22, 2014.

The Company is eligible to receive pre-commercial and commercial milestone payments with respect to the licensed products totaling up to an additional $621,000, comprised of up to $53,500 in preclinical and clinical milestone payments, up to $387,500 in regulatory milestone payments, and up to $180,000 in sales-based milestone

XENON PHARMACEUTICALS INC.

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(Expressed in thousands of U.S. dollars except share and per share figures) (continued)

14. Collaboration Agreements (continued):

payments for multiple products and indications. In addition, the Company is eligible to receive royalties based on net sales of the licensed products, which range from a mid single-digit percentage to ten percent for small-molecule inhibitors for the timeframe that such products are covered by the licensed patents and a low single-digit percentage thereafter, plus a low single-digit percentage for large-molecule inhibitors of Nav1.7. The Company believes that the potential milestone payments for preclinical, clinical and regulatory milestones under this agreement are substantive and at risk at inception of this agreement, and, as such, expects that these future milestone payments will be recognized as revenue in the period that each milestone is achieved. In the year ended December 31, 2013, a $5,000 milestone payment has been recognized. No such milestone payments have been recognized in the six months ended June 30, 2014 (unaudited).

The Company believes that the potential sales-based milestone payments under this agreement are not substantive as the Company does not expect to contribute effort to their achievement and expects such sales-based milestones will generally be achieved after the period of substantial involvement under the collaboration. Therefore, the Company expects that future sales-based contingent consideration milestone payments will be recognized as revenue when such milestones are achieved, assuming all other revenue recognition criteria are met. As of both December 31, 2013 and June 30, 2014 (unaudited), no such milestone payments have been recognized.

The Company's agreement with Genentech expires on the date of the expiration of all payment obligations to the Company under the agreement. Genentech may terminate the agreement with three months advance notice anytime on or after the third anniversary of the effective date of the agreement, and each party may terminate the agreement in the event of a material breach by the other party that remains uncured for 90 days. In the event that Genentech terminates the agreement due to the Company's breach, Genentech retains its licenses and its payment obligations to the Company are reduced. In the event that the Company terminates the agreement due to Genentech's breach, the rights and licenses granted to Genentech revert back to the Company, subject to certain rights to make and use certain large molecule product candidates that are retained by Genentech, and Genentech is obligated to assign certain regulatory approvals and grant certain licenses to the Company to enable the Company to develop and commercialize certain terminated products outside of the collaboration.

In March 2014, the Company entered into a new agreement with Genentech for pain genetics, using the Company's Extreme Genetics discovery platform to focus on identifying genetic targets associated with rare phenotypes where individuals have an inability to perceive pain or where individuals have non-precipitated spontaneous severe pain. Pursuant to the terms of this agreement, any intellectual property arising out of the collaboration will be jointly owned by the Company and Genentech. The Company also granted Genentech a time-limited, exclusive right of first negotiation on a target-by-target basis to form joint drug discovery collaborations. Under the terms of this agreement, Genentech paid an upfront payment of $1,500. The Company is eligible for an additional $2,000 in milestone payments, and, at the Company's option, a Genentech affiliate will invest up to $5,000 in a private placement concurrent with the potential IPO.

The Company identified several deliverables under this agreement with Genentech, including non-exclusive licenses to certain intellectual property controlled by the Company, a commitment to participate in a joint steering committee and collaborative research services to be performed by the Company. The Company concluded that the licenses did not have stand-alone value to Genentech without the Company's technical expertise and joint steering committee participation during the initial two year period. Therefore, the Company has determined that the various deliverables should be considered as a single unit of accounting. As such the Company determined that the $1,500 upfront payment should be recognized as revenue ratably over the expected period of performance, being the two-year period ending March 18, 2016.

The Company believes that the potential milestone payments under this agreement are substantive and at risk at inception of this agreement, and, as such, expects that these future milestone payments will be recognized as

14. Collaboration Agreements (continued):

revenue in the period that each milestone is achieved. As of June 30, 2014 (unaudited), no such milestone payments have been recognized.

(d) Isis collaboration and licensing agreement:

In November 2010, the Company entered into a collaboration and license agreement with Isis. The Company issued Isis a convertible, interest-bearing promissory note as payment of the $1,500 upfront fee required by the agreement, which was accounted for as a research and development expense. In June 2013, the Company made this payment to Isis, including accrued interest, pursuant to the terms of the convertible promissory note. Under the terms of this agreement, the Company received an option to obtain from Isis worldwide exclusive licenses to develop and commercialize antisense products targeting hepcidin and/or hemojuvelin, each of which is a validated target for anemia of chronic disease. Antisense products have the potential to treat diseases by binding to and inactivating the messenger RNA of disease-causing genes. The antisense products under this program targeted hepcidin, a liver-derived peptide hormone that regulates iron levels in the body. The option became exercisable upon the initiation of IND-enabling toxicology studies with a development candidate compound. Isis and the Company were responsible for their own costs related to the initial research program that led to the selection of the development candidate compound. During the year ended December 31, 2013, the Company exercised the option. Under the terms of the agreement, the Company paid Isis an option exercise fee of $2,000, which was accounted for as a research and development expense for the period. In the fourth quarter of 2013, the Company discontinued development of product candidates under this program.

The Company may terminate the agreement with Isis upon 90 days' notice to Isis. Either party may terminate the agreement in the event of a material breach by the other party that remains uncured for 60 days. In the first quarter of 2014, the Company provided notice of termination of the agreement to Isis.

(e) Essex Chemie AG (formerly known as Merck Sharp & Dohme GmbH), an affiliate of Merck & Co., Inc. ("Merck"), exclusive collaborative research and option agreement:

In June 2009, the Company entered into an exclusive collaborative research and option agreement with Merck pursuant to which the parties conducted a research program to discover and develop novel small-molecule candidates for the potential treatment of cardiovascular disease. Merck provided payments to the Company for the Company's FTEs who performed the Company's activities pursuant to the research program conducted under the agreement. The Merck collaborative research program ended in December 2012.

In addition, the Company agreed to perform certain genome sequencing work in exchange for a milestone payment of $5,000 payable upon successful conclusion of such work. This payment was made by Merck in February 2010. The Company has determined that this milestone payment was not substantive and should not be considered as a separate element. The Company identified several deliverables under the agreement with Merck, including options to obtain a license, a commitment to participate in a joint steering committee and research and development services to be performed by the Company on behalf of Merck. The Company concluded that the options to license did not have stand-alone value apart from the related research and development services to be delivered. In addition, the Company was unable to estimate a fair value for the undelivered items in the agreement with Merck. Accordingly, the Company has accounted for the deliverables under this agreement as a single unit of accounting.

Under the terms of the agreement, Merck had the option to obtain an exclusive license under certain intellectual property controlled by the Company to develop and commercialize compounds and products directed to targets in the research program, which has now expired. In June 2012, Merck exercised its option and paid the Company $2,000 to obtain such a worldwide exclusive license. The option exercise was determined to be substantive and at risk at the inception of the agreement and, as such, was recognized in the period that the option was exercised by Merck.

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14. Collaboration Agreements (continued):

Under the agreement with Merck, the Company is eligible to receive up to $21,000 in preclinical and clinical milestone payments and up to $43,000 in regulatory milestone payments for products directed to the licensed target, as well as royalties on future product sales at percentages from the mid to high single-digit range. The Company received a milestone payment of $1,000 in 2010 and a milestone payment of $1,000 in 2011 relating to research progress on two separate targets. Both research milestones were determined to be substantive and at risk at the inception of the agreement and, as such, were recognized in the respective period the milestones were achieved. The Company believes that future contingent consideration milestone payments are not considered substantive as the Company is not contributing effort to the achievement of such milestones now that the period of substantial involvement is complete, there are no undelivered elements and no continuing research obligations under this collaboration.

The Company has an option to co-fund Phase 1 and first Phase 2 clinical trials of product candidates licensed by Merck by paying Merck 50% of such development costs. Such co-funding option is available at the IND-filing stage for the applicable product candidate. If the Company exercises its co-funding option, then the maximum eligible milestone amounts due to the Company increase to $86,500, and the royalties increase to the high single-digit to the sub-teen double-digit range. Through both December 31, 2013 and June 30, 2014 (unaudited), the Company has not yet exercised the co-funding option.

The Company's agreement with Merck expires on the date of the expiration of all royalty payment obligations to the Company under the agreement. Merck has the right to terminate the agreement upon providing certain notices to the Company. Each party may terminate the agreement in the event of a material breach by the other party that remains uncured for 90 days after notice of such breach. In the event that Merck terminates the agreement due to the Company's breach, the licenses granted to Merck survive and become fully paid up. In the event that the Company terminates the agreement due to Merck's breach, the licenses granted to Merck terminate.

(f) Genome BC collaboration agreement:

In January 2009, the Company entered into a research funding agreement with Genome BC to co-fund IND-enabling studies for antisense products targeting hepcidin or hemojuvelin. The deliverables of the research activities are to identify development candidates for both hepcidin and hemojuvelin targets. Under the agreement with Genome BC the Company carried out certain research activities with partial funding that Genome BC provided on a quarterly basis over the term of the research program. This agreement expired at the end of its term on September 30, 2013.

Under the research funding agreement, the Company agreed to give to Genome BC at each quarter (and in connection with Genome BC delivering the agreed-upon research funding for that quarter) rights to be issued in the future for a number of the Company's common shares without paying cash consideration, or subscription rights. The number of shares to which Genome BC is entitled under each quarter's subscription rights are proportional to their funding amount paid to the Company for that quarter, calculated by: the quotient of (a) one-half of the Genome BC funding amount to the Company for that quarter divided by (b) the greatest of: (i) CAD$10.64; (ii) the converted U.S. dollar share price; and (iii) the most recent issue price of the Company's common shares. The subscription rights are automatically exchangeable into common shares of the Company on a 1:1 basis on a date three years after the subscription rights are issued without additional cash consideration being paid by Genome BC. However, in the event of a public offering, including an IPO or a sale or liquidation of the Company, Genome BC's remaining subscription rights would automatically convert to common shares immediately prior to such event.

As of December 31, 2013, Genome BC had subscription rights exchangeable for 64,952 (December 31, 2012—54,390) common shares. As of June 30, 2014, 51,810 of such subscription rights remain outstanding (unaudited). See Note 11 for further details.

In the event that a product arising from the research collaboration with Genome BC is the subject of a regulatory filing in any jurisdiction seeking marketing approval to sell such product, then one-half of the total research funding

XENON PHARMACEUTICALS INC.

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14. Collaboration Agreements (continued):

provided by Genome BC will become repayable by the Company within 60 days of such filing. As of both December 31, 2013 and June 30, 2014 (unaudited), Genome BC had provided $2,410 in research funding to the Company, of which one-half (or $1,205) could be subject to this contingent repayment condition. Given the uncertainty related to such an event and the early stage of development, the Company has determined that it would only be appropriate to recognize the contingent repayment to Genome BC when conditions suggest that such repayment is more likely than not to occur. As of June 30, 2014, the Company determined such an event continues to be unlikely (unaudited).

The following table is a summary of the revenue recognized from the Company's collaborations for each of the years ended December 31, 2011, 2012 and 2013 and for the six months ended June 30, 2013 and 2014:

	YEAR ENDED DECEMBER 31,			SIX MONTHS ENDED JUNE 30, (unaudited)	
	2011	2012	2013	2013	2014
uniQure:					
Milestone payment	$ —	$ 198	$ 531	$ —	$ —
Teva:					
Recognition of upfront payment	—	927	13,143	6,607	6,120
Research funding	—	—	630	294	167
Genentech:					
Recognition of upfront payment	94	3,431	3,300	1,659	1,755
Research funding	93	3,517	4,514	2,257	2,255
Milestone payment	—	—	5,062	—	—
Merck:					
Recognition of initial milestone payment	2,145	1,060	—	—	—
Option fee	—	2,060	—	—	—
Research funding	3,206	2,442	—	—	—
Milestone payment	1,038	—	—	—	—
Genome BC:					
Research funding	339	665	172	168	—
Total collaboration revenue	$6,915	$14,300	$27,352	$10,985	$10,297

15. Commitments and Contingencies:

(a) Lease commitments:

The Company entered into an amended lease agreement for research laboratories and office space in Burnaby, British Columbia, Canada for a 120-month term from April 1, 2012 to March 31, 2022, which included an element of free rent and tenant inducement that will be amortized over the term of the lease.

Lease expense for the year ended December 31, 2013 was $962 (2012—$1,017, 2011—$1,601). Lease expense for the six months ended June 30, 2014 was $433 (2013—$425) (unaudited).

(Expressed in thousands of U.S. dollars except share and per share figures) (continued)

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15. Commitments and Contingencies (continued):

Future minimum annual lease payments under existing operating lease commitments are as follows:

PERIOD ENDING DECEMBER 31,	
2014	$ 527
2015	1,053
2016	1,053
2017	1,114
2018	1,134
2019 and thereafter	3,687
Total	$ 8,568

(b) Guarantees and indemnifications:

(i) The Company, as permitted under Canadian law and in accordance with its articles and by-laws, will enter into indemnification agreements with each of its officers and directors, and certain other Company employees, and will indemnify such persons for certain events or occurrences, subject to certain limits, while such person is or was serving at the Company's request in such capacity. The term of the indemnification period will last as long as such person may be subject to any proceeding arising out of acts or omissions of such person in such capacity.

The maximum amount of potential future indemnification is unlimited; however, the Company currently holds directors' and officers' liability insurance. This insurance limits the Company's exposure and may enable it to recover a portion of any future amounts paid. The Company believes that the fair value of these indemnification obligations is minimal. Accordingly, the Company has not recognized any liabilities relating to these obligations for any period presented.

(ii) The Company has entered into license and research agreements with third parties that include indemnification provisions that are customary in the industry. These indemnification provisions generally require the Company to compensate the other party for certain damages and costs incurred as a result of third party claims or damages arising from these transactions.

The maximum amount of potential future indemnification is unlimited; however, the Company currently holds commercial and product liability insurance. This insurance limits the Company's exposure and may enable it to recover a portion of any future amounts paid. Historically, the Company has not made any indemnification payments under such agreements and the Company believes that the fair value of these indemnification obligations is minimal. Accordingly, the Company has not recognized any liabilities relating to these obligations for any period presented.

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16. Income Taxes:

Income tax expense (recovery) varies from the amounts that would be computed by applying the expected Canadian and provincial statutory income tax rate of 25.75% (2012–25%, 2011 – 26.5%) to loss before income taxes as shown in the following table:

	2011	2012	2013
Computed taxes at Canadian federal and provincial tax rates	$ (3,178)	$ (1,075)	$ 3,098
Change in valuation allowance	1,910	2,710	(2,029)
Investment tax credits earned	(1,804)	(1,418)	(529)
Tax attributes expired/utilized	2,720	(356)	198
Future tax rate reductions	249	—	(1,019)
Non-deductible expenditures	113	107	(374)
Other reconciling items	(10)	32	655
Income tax expense	$ —	$ —	$ —

Deferred income tax assets and liabilities result from the temporary differences between the amount of assets and liabilities recognized for financial statement and income tax purposes. The significant components of the net deferred income tax assets and liabilities are as follows:

	2012	2013
Deferred income tax assets		
Investment tax credits	$ 19,063	$ 19,833
Scientific research and experimental development pool	17,873	18,592
Deferred revenues	11,663	7,230
Non-capital losses	2,122	2,755
Property, plant and equipment	2,112	2,386
Other	596	604
Less—valuation allowance	(53,429)	(51,400)
Net deferred income tax assets	$ —	$ —

The realization of deferred income tax assets is dependent upon the generation of sufficient taxable income during future periods in which the temporary differences are expected to reverse. The valuation allowance is reviewed on a quarterly basis and if the assessment of the “more likely than not” criteria changes, the valuation allowance is adjusted accordingly. The valuation allowance continues to be applied against deferred income tax assets where the Company has assessed that the realization of such assets does not meet the “more likely than not” criteria.

At December 31, 2013, the Company has unclaimed tax deductions for scientific research and experimental development expenditures of $71,508 (2012—$71,490) with no expiry.

At December 31, 2013, the Company has $17,068 (2012—$16,180) of investment tax credits available to offset federal taxes payable and $7,203 (2012—$6,928) of provincial tax credits available to offset provincial taxes payable in the future.

At December 31, 2013, the Company has non-capital losses carried forward for tax purposes, which are available to reduce taxable income of future years of approximately $10,596 (2012—$8,489).

The investment tax credits and loss carry forwards expire over various years to 2033.

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(Expressed in thousands of U.S. dollars except share and per share figures) (continued)

16. Income Taxes (continued):

As of December 31, 2013, the total amount of the Company's unrecognized tax benefits were $6,350 (2012—$6,350). If recognized in future periods, the unrecognized tax benefits would affect the Company's effective tax rate.

The following table summarizes the activity related to the Company's unrecognized tax benefits:

	2012	2013
Balance as of January 1	$ 1,268	$ 6,350
Increases related to current year positions	5,082	—
Balance as of December 31	$ 6,350	$ 6,350

The Company recognizes potential accrued interest and penalties related to unrecognized tax benefits within the income tax provision. Interest and penalties have not been accrued at December 31, 2013 as none would be owing on the unrecognized tax benefits due to the availability of non-capital losses to shelter any potential taxable income arising thereon.

The Company does not currently expect any significant increases or decreases to these unrecognized tax benefits within 12 months of the reporting date.

The Company currently files an income tax return in Canada, the jurisdiction in which it is subject to tax. In jurisdictions in which the Company does not believe it is subject to tax and therefore does not file income tax returns, the Company can provide no certainty that tax authorities in those jurisdictions will not subject one or more tax years (since the inception of the Company) to examination. Further, while the statute of limitations in each jurisdiction where an income tax return has been filed generally limits the examination period, as a result of loss carry-forwards, the limitation period for examination generally does not expire until several years after the loss carry-forwards are utilized. Other than routine audits by tax authorities for tax credits and tax refunds that the Company claims, the Company is not aware of any other material income tax examination currently in progress by any taxing jurisdiction.

17. Related Parties:

Genworks Inc. ("Genworks"), is controlled by a director of the Company who is the president and principal beneficial shareholder of Genworks. Genworks provides certain scientific consulting services to the Company pursuant to a consulting agreement. The Company did not incur any cash consulting fees to Genworks for the six months ended June 30, 2013 and 2014 (unaudited) and for the year ended December 31, 2013 (2012—$307, 2011—$279).

On January 1, 2012, the Company granted Genworks an option to purchase 50,000 of its common shares at an exercise price of CAD$0.77 per share and on January 1, 2013, the Company granted Genworks an option to purchase 150,000 of its common shares at an exercise price of CAD$0.55 per share. Pursuant to a performance bonus awarded to Genworks in acknowledgment of services conducted prior to September 1, 2012 relating to the Company's sublicense agreement with uniQure, in the event that the Company receives royalty payments from uniQure satisfying certain pre-specified thresholds, Genworks has a right to receive a portion of such royalty payments, totaling up to CAD$600. As of September 1, 2012, no further fees or bonuses are payable to Genworks under such consulting agreement.

No amounts have been accrued as of June 30, 2014 and December 31, 2013 (December 31, 2012—$167) relating to services provided by Genworks.

XENON PHARMACEUTICALS INC.

Notes to Financial Statements
(Expressed in thousands of U.S. dollars except share and per share figures) (continued)

17. Related Parties (continued):

One of the Company's directors is a former equityholder and former director of Medpace, Inc. ("Medpace"). The Company did not incur any contract research organization fees to Medpace for the six months ended June 30, 2013 and 2014 (unaudited) and for the year ended December 31, 2013 (2012 - $151, 2011 - $876). Previously incurred contract research organization fees were paid to Medpace in consideration of certain clinical development services provided by Medpace by individuals other than the Company's director. None of these fees were paid directly to the Company's director. The Company is not currently a party to a consulting agreement with Medpace. No amounts have been accrued as of June 30, 2014 and December 31, 2013 (December 31, 2012 - $0) relating to services provided by Medpace.

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Shares

XENON

Common Shares

PRELIMINARY PROSPECTUS

Joint Book-Running Managers

Jefferies
Cowen and Company

Co-Managers

Wells Fargo Securities
RBC Capital Markets

, 2014

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PART II
INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution

Estimated expenses, other than underwriting discounts and commissions, payable by the registrant in connection with the sale of the common shares being registered under this registration statement are as follows.

ITEM	AMOUNT TO BE PAID
SEC Registration Fee	$ *
FINRA Filing Fee	*
The NASDAQ Global Market Listing Fee	*
Printing and Engraving Expenses	*
Legal Fees and Expenses	*
Accounting Fees and Expenses	*
Blue Sky, Qualification Fees and Expenses	*
Transfer Agent Fees and Expenses	*
Miscellaneous Expenses	*
Total	$ *

* To be completed by amendment.

Item 14. Indemnification of Directors and Officers

Under the Canada Business Corporations Act, or CBCA, we may indemnify our current or former directors or officers or any other individuals who act or have acted at our request as a director or officer, or an individual acting in a similar capacity, of another entity, against all costs, charges, and expenses, including an amount paid to settle an action or satisfy a judgment, reasonably incurred by the individual in respect of any civil, criminal, administrative, investigative or other proceeding in which the individual is involved because of his or her association with us or the other entity. The CBCA also provides that we may advance moneys to a director, officer or other individual for costs, charges and expenses reasonably incurred in connection with such a proceeding. The individual shall repay the moneys to us if indemnification of the individual is ultimately prohibited under the CBCA, as described below.

Indemnification is prohibited under the CBCA unless the individual:

- acted honestly and in good faith with a view to our best interests, or the best interests of the other entity for which the individual acted as director or officer or in a similar capacity at our request;
- in the case of a criminal or administrative action or proceeding that is enforced by a monetary penalty, the individual had reasonable grounds for believing that his or her conduct was lawful; and
- was not judged by the court or other competent authority to have committed any fault or omitted to do anything that the individual ought to have done.

Our by-laws require us to indemnify each of our directors, officers, former directors and officers and persons who act or acted at our request as a director or officer, or in a similar capacity, of a body corporate. We will indemnify such individual against all costs, charges and expenses, including an amount paid to settle an action or proceeding to which the individual is made a party by reason of being or having been a director of officer of us or such body corporate. Our by-laws also require us to, with the approval of a court, indemnify such individual referred to above, in respect of an action by or on behalf of us or such body corporate to procure a judgment in its favor, to which the individual is made a party by reason of being or having been a director or an officer of us or such body corporate, against all costs, charges and expenses reasonably incurred by him in connection with such action. However, we shall not indemnify such individual if the individual did not act honestly and in good faith with a view to our best interests or, in the case of a criminal or administrative action or proceeding that is enforced by a monetary penalty, the individual did not have reasonable grounds for believing that his or her conduct was lawful.

Our by-laws authorize us, with the approval of our board of directors, to purchase and maintain insurance for the benefit of each of our current or former directors or officers and each person who acts or acted at our request as a director or officer of another entity, against any liability incurred by him or her.

We will enter into indemnification agreements with each of our directors and certain officers. As provided by our by-laws, these agreements, among other things, will require us to indemnify each director and officer to the fullest extent permitted by Canadian law, including indemnification of all costs, charges and expenses reasonably incurred by such person in any action or proceeding, including any action or proceeding by or in right of us, arising out of the person's services as a director or officer; provided that, we will not indemnify such individual if, among other things, he or she did not act honestly and in good faith with a view to our best interests and, in the case of a criminal or penal action, the individual did not have reasonable grounds for believing that his or her conduct was lawful.

We expect to have an insurance policy in place prior to the closing of this offering that covers our directors and certain officers, substantially in line with that purchased by similarly situated companies.

Insofar as indemnification of liabilities arising under the Securities Act 1933, as amended, may be permitted to members of our board of directors, officers or persons controlling us pursuant to the foregoing provisions, we have been informed that, in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act of 1933, as amended, and is therefore unenforceable.

We plan to enter into an underwriting agreement which provides that the underwriters are obligated, under certain circumstances, to indemnify our directors and officers against specified liabilities, including liabilities under the Securities Act of 1933, as amended.

Item 15. Recent Sales of Unregistered Securities

The following list sets forth information regarding all unregistered securities sold by us since January 1, 2011, share numbers have not been adjusted for the reverse share split to be effective prior to the closing of this offering. No underwriters were involved in the sales.

(a) From January 1, 2011 through August 20, 2014, we issued an aggregate of 46,374 common shares upon the exercise of stock options granted to certain of our directors, officers, employees and other service providers under our Amended and Restated Stock Option Plan, at exercise prices ranging from CAD$0.50 to CAD$1.25 per common share, for aggregate consideration of CAD$56,894.

(b) From January 1, 2011 through August 20, 2014, we issued an aggregate of 74,963 common shares pursuant to subscription rights issued under a research funding agreement and its predecessor agreement with Genome B.C.

(c) From January 1, 2011 through August 20, 2014 we granted to certain of our directors and officers, stock options under the Amended and Restated Stock Option Plan to purchase an aggregate of 3,368,000 common shares at exercise prices ranging from CAD$0.55 to CAD$2.31 per common share.

(d) From January 1, 2011 through August 20, 2014 we granted to certain of our non-officer employees and other service providers stock options under the Amended and Restated Stock Option Plan to purchase an aggregate of 740,400 common shares at exercise prices ranging from CAD$0.55 to CAD$2.31 per common share.

(e) From January 1, 2011 through August 20, 2014, we issued to Genome B.C. 64,952 subscription rights, under a research funding agreement and its predecessor agreement, of which 51,810 subscription rights are outstanding. These outstanding subscription rights are automatically convertible into an aggregate of 51,810 common shares upon certain events, including the closing of this offering.

The securities described in Items 15(a) and 15(b) were offered, sold and issued pursuant to the Canadian prospectus exemption under section 2.42 of National Instrument 45-106—*Prospectus and Registration Exemptions*, or NI 45-106, as such securities were offered, sold and issued in accordance with the terms and conditions of securities that we had previously issued. The securities described in Items 15(c) and 15(d) were offered, sold and issued pursuant to the Canadian prospectus exemption under section 2.24 of NI 45-106 as such securities were offered, sold and issued by us to our directors, officers, employees and consultants. The securities described in Items 15(e) were issued pursuant to the Canadian prospectus exemption under section 2.3 of NI 45-106 as such securities were issued to an accredited investor, as such term is defined in NI 45-106.

Any grant of our stock options and any issuance of our common shares upon the exercise of such stock options described Items 15(a), (c) and (d) above that was made to a resident of the U.S. was made pursuant to written compensatory plans or arrangements with our directors, officers, employees and service providers in reliance on the exemption provided by Rule 701 promulgated under Section 3(b) of the Securities Act. All recipients either received adequate information about us or had access, through employment or other relationships, to such information.

Item 16. Exhibits and Financial Statement Schedules

(a) Exhibits.

EXHIBIT NUMBER	DESCRIPTION
1.1*	Form of Underwriting Agreement.
3.1*	Form of Articles of Amendment of the Company, to be effective upon completion of the offering.
3.2	Form of Amended and Restated By-laws of the Company, to be effective upon completion of the offering.
4.1*	Form of Common Share Certificate.
4.2*	Amended and Restated Investor Rights Agreement, dated December 6, 2006, by and among the Company and the investors listed on Exhibit A and Exhibit B thereto, as amended.
5.1*	Opinion of McCarthy Tétrault LLP.
10.1†*	Exclusive Collaboration Research and Option Agreement, dated June 10, 2009, by and between the Company and Merck Sharp & Dohme Research Ltd, as amended.
10.2†*	Sublicense and Research Agreement, dated June 18, 2001, by and between the Company and uniQure Biopharma B.V. (formerly Amsterdam Molecular Therapeutics B.V.), as amended by the Consent of the Company and the University of British Columbia to the uniQure-Chiesi Agreement, dated June 28, 2013.
10.3†*	Collaborative Research and License Agreement, dated December 22, 2011, by and among the Company, Genentech, Inc. and F. Hoffmann-La Roche Ltd, as amended.
10.4†*	Collaborative Development and License Agreement, dated December 7, 2012, by and between the Company and Ivax International GmbH, as amended.
10.5†*	License Agreement, dated May 19, 2000, by and between the Company and the University of British Columbia, as amended.
10.6**	Consulting Agreement, dated January 1, 2004, by and between the Company and Genworks Inc., as amended.
10.7**#	Stock Option Plan, as amended, and form of option agreement thereunder.
10.8#	2014 Equity Incentive Plan, and form of option agreement thereunder.
10.9*#	Offer Letter, dated December 7, 2004, by and between the Company and Simon Pimstone.
10.10*#	Offer Letter, dated October 13, 2000, by and between the Company and Paul Goldberg.
10.11*#	Offer Letter, dated August 1, 2013, by and between the Company and Ian Mortimer.
10.12*#	Offer Letter, dated May 15, 2001, by and between the Company and Karen Corraini.
10.13*#	Offer Letter, dated February 12, 2001, by and between the Company and Robin Sherrington.
10.14	Lease, dated as of 2001, by and between the Company and Discovery Parks Incorporated, as amended through July 1, 2014.

EXHIBIT NUMBER	DESCRIPTION
10.15*#	Form of Director and Executive Officer Indemnification Agreement.
10.16	Common Share Put Agreement, dated as of March 19, 2014, by and between the Company and Roche Finance LTD.
21.1**	List of Subsidiaries of the Company.
23.1*	Consent of KPMG LLP, Independent Registered Public Accounting Firm.
23.2*	Consent of McCarthy Tétrault LLP (included in Exhibit 5.1).
24.1*	Powers of Attorney (included in page II-5 to this registration statement).

* To be filed by amendment.
** Previously submitted.
† Confidential treatment has been requested with respect to certain portions of this exhibit. Omitted portions have been filed separately with the Securities and Exchange Commission.
\# Indicates management contract or compensatory plan.

(b) Financial Statement Schedules.

Schedules not listed above have been omitted because the information required to be set forth therein is not applicable or is shown in the financial statements or notes thereto.

Item 17. Undertakings

The undersigned registrant hereby undertakes to provide to the underwriters at the closing specified in the underwriting agreements, certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

Insofar as indemnification for liabilities arising under the Securities Act of 1933, as amended may be permitted to directors, officers and controlling persons of the registrant, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933, as amended and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act of 1933, as amended, and will be governed by the final adjudication of such issue.

The undersigned hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act of 1933, as amended, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act of 1933, as amended, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant has duly caused this Registration Statement on Form S-1 to be signed on its behalf by the undersigned, thereunto duly authorized, in Burnaby, British Columbia, Canada, on , 2014.

XENON PHARMACEUTICALS INC.

By: ______________________________
Simon Pimstone
President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Simon Pimstone, Ian Mortimer and Karen Corraini as his or her true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities (including his or her capacity as a director and/or officer of Xenon Pharmaceuticals Inc.) to sign any or all amendments (including post-effective amendments) to this registration statement and any and all additional registration statements pursuant to Rule 462(b) of the Securities Act of 1933, as amended, and to file the same, with all exhibits thereto, and all other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as they, he or she might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agents or any of them, or their, his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

SIGNATURE	TITLE	DATE
Simon Pimstone	President, Chief Executive Officer and Director (Principal Executive Officer)	, 2014
Ian Mortimer	Chief Financial Officer (Principal Financial and Accounting Officer)	, 2014
Michael Tarnow	Chair of the Board of Directors	, 2014
Mohammad Azab	Director	, 2014
Johnston Evans	Director	, 2014
Michael Hayden	Director	, 2014

SIGNATURE	TITLE	DATE
Frank Holler	Director	, 2014
Gary Patou	Director	, 2014
Evan Stein	Director	, 2014

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EXHIBIT INDEX

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24.1*	Powers of Attorney (included in page II-5 to this registration statement).

* To be filed by amendment.
** Previously submitted .
† Confidential treatment has been requested with respect to certain portions of this exhibit. Omitted portions have been filed separately with the Securities and Exchange Commission.
# Indicates management contract or compensatory plan.

Exhibit 3.2

AMENDED AND RESTATED BY-LAW NO. 1

A by-law relating generally to the transaction of the business and affairs of

XENON PHARMACEUTICALS INC.

ARTICLE 1
INTERPRETATION

1.1 Definitions.

In this Amended and Restated By-Law No. 1, unless the context otherwise requires, the following terms shall have the following meanings, respectively:

(a) "**Act**" means the *Canada Business Corporations Act*, including the regulations thereunder, as amended from time to time;

(b) "**Applicable Securities Laws**" means the applicable securities legislation of each relevant province and territory of Canada and the United States of America and relevant state thereof, as amended from time to time, the rules, regulations and forms made or promulgated under any such statute and the published national instruments, multilateral instruments, policies, bulletins and notices of the securities commission and similar regulatory authority, as amended

(c) "**Articles**" shall mean the articles of the Corporation, as may be amended from time to time;

(d) "**Board**" means the board of directors of the Corporation;

(e) "**Business Day**" means a day other than a Saturday, Sunday or statutory holiday in the Province of British Columbia.

(f) "**By-law No. 1**" means this amended and restated By-law No. 1, as may be amended from time to time;

(g) "**By-laws**" means this By-law No. 1 and all other by-laws of the Corporation from time to time in force and effect;

(h) "**Corporation**" means Xenon Pharmaceuticals Inc.;

(i) "**Public Announcement**" means disclosure by a press release disseminated through a national news service in Canada or the United States of America, or in a document publicly filed by the Corporation under its profile on the System of Electronic Document Analysis and Retrieval at www.sedar.com or on the Electronic Data Gathering, Analysis and Retrieval system (EDGAR System) at www.sec.gov or such other means as may be prescribed under Applicable Securities Laws; and

(j) "**Shareholders' Meetings**" means the annual meetings of shareholders and the special meetings of shareholders.

Terms used herein that are defined in the Act and not defined herein shall have the meanings given to those terms in the Act. Words importing a singular number include the plural and vice versa. Words importing gender include all genders. Words importing a person include an individual, partnership, association, body corporate, trustee, executor, administrator and legal partnership.

ARTICLE 2
OFFICES

2.1 **Registered Office.**

The registered office of the Corporation shall be in the province within Canada specified in the Articles and at such place and address therein as the Board may from time to time determine.

2.2 **Additional Offices.**

The Corporation may, in addition to its registered office, have such other offices and places of business, both within and outside of Canada, as the Board may from time to time determine or as the business and affairs of the Corporation may require.

ARTICLE 3
SHAREHOLDER MEETINGS

3.1 **Annual Meetings.**

Subject to the Act, the annual meeting of shareholders shall be held at such place or manner and at a time and on such date as shall be determined by the Board and stated in the notice of the meeting.

3.2 **Special Meetings.**

Subject to the Act, special meetings of shareholders, for any purpose or purposes, may be called by the Board and shall be held at such place or manner and at a time and on such date as shall be determined by the Board and as stated in the notice of the meeting.

3.3 **Electronic Meetings.**

If authorized by the Board in its sole discretion, and subject to the Act and such guidelines and procedures as the Board may adopt, shareholders and proxyholders not physically present at an annual meeting of shareholders or special meeting of shareholders may, by means of a telephonic, electronic or other communication facility that permits all participants to communicate adequately with each other during the meeting, if the Corporation makes available such a communication facility:

(a) participate in a Shareholders' Meeting; and

(b) be deemed present in person and vote at a Shareholders' Meeting, whether such meeting is to be held at a designated place or solely by means of a telephonic, electronic or other communication facility, provided that such meeting is held in accordance with the Act and related regulations and any policy and guidelines approved by the Board.

3.4 **Notice.**

Notice of each Shareholders' Meeting stating the place, date, and time of the meeting, and the means of communication facility, if applicable, by which shareholders and proxyholders may participate in such meeting, shall be sent to each shareholder entitled to vote thereat, to each director, and to the auditor of the Corporation not less than 21 days nor more than 60 days before the date of the meeting, or within such other period as may be prescribed by the Act. The notice shall state the nature of the business to be transacted at the meeting.

If a Shareholders' Meeting is adjourned for less than 30 days, it is not necessary to give notice of the adjourned meeting, other than by announcement at the earliest meeting that is adjourned.

3.5 **Quorum.**

At the commencement of any Shareholders' Meeting, the presence, in person or by proxy, of the holders of the shares in the capital of the Corporation representing not less than 33 ⅓% of the shares entitled to vote at such meeting shall constitute a quorum for the transaction of business at such meeting, except that when specified business is to be voted on by a class or series of shares voting as a class, the holders of shares representing not less than 33 ⅓% of the voting power of the outstanding shares of such class or series shall constitute a quorum of such class or series for the transaction of such business.

3.6 **Adjournments.**

(a) Adjournments for less than 30 days. Any Shareholders' Meeting may be adjourned by the Chair of the meeting, from time to time, whether or not there is a quorum, to reconvene at the same or some other place. If the meeting is adjourned for less than 30 days, notice need not be given of any such adjourned meeting other than by announcement at the earliest meeting that it is adjourned.

(b) Adjournments for 30 days or more. If the adjournment is for 30 days or more, or if after the adjournment a new record date is fixed for the adjourned meeting, notice of the adjourned meeting shall be given as for an original meeting and unless required under the Act, solicitation of proxies will not be mandatory.

(c) Adjourned Meetings. At the adjourned meeting, the shareholders, or the holders of any class or series of shares entitled to vote separately as a class, as the case may be, may transact any business that might have been transacted at the original meeting. If the original meeting was adjourned for lack of a quorum, at the adjourned meeting, the shareholders present in person or their duly appointed proxyholders so present shall form the quorum whatever the number of shares represented. If the original meeting was adjourned for any other reason, the quorum requirement for the adjourned meeting shall be the same as that for the original meeting.

3.7 **Conduct of Meetings.**

(a) Appointment of Chair. The Chair of each Shareholders' Meeting shall be such person as may be appointed by the Board or, if no such person is appointed or such appointed person is unable or unwilling to so act, the Chair of the Board or, if the Chair of the Board is unable or unwilling to so act, the Chief Executive Officer or, if the Chief Executive Officer is unable or unwilling to so act, one of the directors present as may be chosen by the persons present and entitled to vote at such Shareholders' Meeting or, if no such director is present or willing to act, provided that such Shareholders' Meeting has been duly called and convened, any person present as may be chosen by the persons present and entitled to vote at such Shareholders' Meeting.

(b) Procedures. The Board may adopt such rules and regulations for the conduct of the Shareholders' Meeting as it shall deem appropriate. Except to the extent inconsistent with the By-laws or such rules and regulations as adopted by the Board, the Chair of any Shareholders' Meeting shall have the right and authority to convene and to adjourn the meeting, to prescribe such rules, regulations and procedures and to do all such acts as, in the judgment of such Chair, are appropriate for the proper conduct of the meeting. Such rules, regulations or procedures, whether adopted by the Board or prescribed by the Chair of the meeting, may include, without limitation, the following:

(i) the establishment of an agenda or order of business for the meeting;

(ii) rules and procedures for maintaining order at the meeting and the safety of those present;

(iii) limitations on attendance at or participation in the meeting to those persons entitled to be present; and

(iv) restrictions on entry to the meeting after the time fixed for the commencement thereof.

3.8 **Persons Entitled to be Present.**

The only persons entitled to be present at a Shareholders' Meeting shall be those persons entitled to vote thereat, the directors and auditors of the Corporation and others who, although not entitled to vote, are entitled or required under any provision of the Act or the Articles or the By-laws to be present at the meeting. Any other person may be admitted only on the invitation of the Chair of the meeting.

ARTICLE 4
SHAREHOLDER VOTING

4.1 **Voting Lists.**

For each Shareholders' Meeting, the Corporation shall prepare, or shall cause to be prepared a complete list of the shareholders entitled to receive notice and/or vote, as applicable in accordance with the Act and applicable laws.

4.2 **Manner of Voting.**

At any Shareholders' Meeting, every shareholder entitled to vote may vote in person or by proxy. Any question at a Shareholders' Meeting shall be decided by a show of hands unless a ballot is required by the Chair of the meeting or requested by a shareholder or proxyholder entitled to vote at the meeting. Upon a show of hands every person who is present and entitled to vote shall have one vote. Whenever a vote by show of hands has been taken upon a question, unless a ballot is so required or requested, a declaration by the chair of the meeting that the vote has been carried or carried by a particular majority or not carried and an entry to that effect in the minutes of the meeting shall be, in the absence of evidence to the contrary, proof of the fact without proof of the number or proportion of the votes recorded in favour of or against any resolution.

4.3 **Ballot.**

On any question proposed for consideration at a Shareholders' Meeting, and whether or not a show of hands has been taken thereon, the Chair may require, or any shareholder or proxyholder entitled to vote at the meeting may request, a ballot. A ballot so required or requested shall be taken in such manner as the Chair shall direct. A requirement or request for a ballot may be withdrawn at any time prior to the taking of the ballot. If a ballot is taken, each person present as shareholder or proxyholder shall be entitled, in respect of the shares which each person is entitled to vote at the meeting upon the question, to that number of votes provided by the Act or the Articles, and the result of the ballot so taken shall be the decision of the shareholders upon that question.

4.4 **Electronic Voting.**

(a) <u>Electronic Voting Permitted.</u> Notwithstanding Section 4.2, any person participating in a Shareholders' Meeting by a telephonic, electronic or other communication facility and entitled to vote at the meeting may vote by means of any telephonic, electronic or other communication facility that the Corporation has made available for that purpose.

(b) <u>Communication Facility.</u> Any vote referred to in Section 4.2 or Section 4.3 may be held entirely by means of a telephonic, electronic or other communication facility if the Corporation makes available such a communication facility, provided, in each case, that the facility:

A. enables the votes to be gathered in a manner that permits their subsequent verification; and

B. permits the tallied votes to be presented to the Corporation without it being possible for the Corporation to identify how each shareholder or group of shareholders voted.

4.5 **Proxies.**

(a) Appointment of Proxyholders. A shareholder entitled to vote at a Shareholders' Meeting may by means of a proxy appoint a proxyholder or one or more alternate proxyholders, who are not required to be shareholders, to attend and act at the meeting in the manner and to the extent authorized by the proxy and with the authority conferred by the proxy. A proxy shall be executed by the shareholder or by the shareholder's attorney authorized in writing. A proxy is valid only at the meeting in respect of which it is given or any adjournment thereof.

(b) Deposit of Proxies. The Board may specify in a notice calling a Shareholders' Meeting a time, preceding the time of such meeting by not more than 48 hours, exclusive of non-Business Days, before which time proxies to be used at such meeting must be deposited with the Corporation or its agent specified in such proxy, in accordance with the instructions set forth in such proxy. Unless otherwise determined by the Board, a proxy shall be acted upon only if, prior to the time so specified, it shall have been deposited in accordance with the instructions set forth in the proxy or, if no such time is specified in the proxy, it shall have been received by the Corporate Secretary of the Corporation or by the Chair of the meeting or any adjournment thereof prior to the commencement of such meeting.

(c) Revocation of Proxies. A shareholder may revoke a proxy by depositing, in the manner for the deposit of proxies set forth in the proxy or related proxy materials, an instrument in writing executed by the shareholder or the shareholder's attorney authorized in writing at the registered office of the Corporation at any time up to and including the last Business Day preceding the day of the meeting, or an adjournment thereof, at which the proxy is to be used or with the Chair of the meeting on the day of the meeting or an adjournment thereof.

4.6 **Adjournments.**

Any meeting of shareholders, annual or special, may be adjourned by the Chair of the meeting, from time to time, whether or not there is a quorum, to reconvene at the same or some other place. Notice need not be given of any such adjourned meeting if the date, time, place, if any, thereof, and the means of telephonic, electronic or other communication facility, if any, by which shareholders and proxyholders may be deemed to be present in person and vote at such adjourned meeting are announced at the earliest meeting that is adjourned. At the adjourned meeting, the shareholders, or the holders of any class or series of shares entitled to vote separately as a class, as the case may be, may transact any business that might have been transacted at the original meeting. If the adjournment is for 30 days or more, or if after the adjournment a new record date is fixed for the adjourned meeting, notice of the adjourned meeting shall be given to each shareholder of record entitled to vote at the meeting and, unless required under the Act or Applicable Securities Laws, solicitation of proxies will not be mandatory. If the original meeting was adjourned for lack of a quorum, at the adjourned meeting, the shareholders present in person or their duly appointed proxyholders so present shall form the quorum whatever the number of shares represented. If the original meeting was adjourned for any other reason, the quorum requirement for the adjourned meeting shall be the same as that for the original meeting.

ARTICLE 5
DIRECTORS

5.1 **Powers.**

The business and affairs of the Corporation shall be managed or supervised under the direction of the Board, which may exercise all such powers of the Corporation and do all such lawful acts and things as are not by statute or by the Articles or by the By-laws required to be exercised or done by the shareholders.

5.2 **Election and Term.**

The directors shall be elected at each annual meeting of shareholders to hold office until the next annual meeting or until their respective successors are elected or appointed, subject to earlier death, resignation, retirement, disqualification or removal.

5.3 **Number and Vacancies.**

The number of directors shall be as set out in the articles of the Corporation and if the articles of the Corporation provide for a minimum and maximum number of directors, the actual number of directors from time to time shall be determined by the Board. Subject to the Act, where a vacancy occurs in the Board for any reason, including an increase in the number of directors, death, resignation, retirement, disqualification, removal or other cause, and a quorum of directors remains, the directors remaining in office may appoint a qualified person to fill the vacancy for the remainder of the term of the vacant seat.

5.4 **Remuneration.**

The Board shall have the authority to fix the remuneration of directors. The directors may be reimbursed their expenses, if any, of attendance at each meeting of the Board and may be paid either a fixed sum for attendance at each meeting of the Board or other compensation as determined by the Board in connection with their service as a director. No such payment shall preclude any director from serving the Corporation in any other capacity and receiving compensation therefor. Members of committees of the Board may be allowed like compensation and reimbursement of expenses for service on the committee and any other compensation the Board shall determine in connection with their service on such committees of the Board.

5.5 **Advance Notice for Nomination of Directors.**

(a) Meetings of Shareholders. Subject to the Act, only persons who are nominated in accordance with the following procedures shall be eligible for election as directors of the Corporation. Nominations of persons for election to the Board of the Corporation may be made at any annual meeting of shareholders, or at any special meeting of shareholders if one of the purposes for which the special meeting was called was the election of directors:

(i) by or at the direction of the Board, including pursuant to a notice of meeting;

(ii) by or at the direction or request of one or more shareholders pursuant to a proposal made in accordance with the provisions of the Act, or a requisition of the shareholders made in accordance with the provisions of the Act; or

(iii) by any person (a "Nominating Shareholder"): (a) who, at the close of business on the date of the giving of the notice provided for below in this Section 5.5 and at the close of business on the record date for notice of such meeting, is entered in the securities register of the Corporation as a holder of one or more shares carrying the right to vote at such meeting or who beneficially owns shares that are entitled to be voted at such meeting and provides evidence satisfactory to the Corporation of such beneficial ownership; and (b) who complies with the notice procedures set forth in this Section 5.5.

(b) Timely Notice. In addition to the other requirements for nominations set forth in this Section 5.5 and under applicable laws, for a nomination to be made by a Nominating Shareholder, the Nominating Shareholder must have given timely notice thereof in proper written form to the Corporate Secretary of the Corporation at the principal executive office of the Corporation. To be timely, a Nominating Shareholder's notice to the Corporate Secretary of the Corporation must be made:

(i) in the case of an annual meeting of shareholders, not less than 30 nor more than 65 days prior to the date of the annual meeting of shareholders; provided, however, that in the event that the annual meeting of shareholders is to be held on a date that is less than 50 days after the date (the “Notice Date”) on which the first Public Announcement of the date of the annual meeting was made, notice by the Nominating Shareholder must be made not later than the close of business on the tenth (10th) day following the Notice Date; and

(ii) in the case of a special meeting (which is not also an annual meeting) of shareholders called for the purpose of electing directors (whether or not called for other purposes), not later than the close of business on the fifteenth (15th) day following the day on which the first Public Announcement of the date of the special meeting of shareholders was made.

The time periods for the giving of a Nominating Shareholder’s notice set forth above shall in all cases be determined based on the original date of the applicable annual meeting or special meeting of shareholders.

In no event shall any adjournment or postponement of a Shareholders’ Meeting or the announcement thereof commence a new time period for the giving of a Nominating Shareholder’s notice as described above.

(c) <u>Proper Written Form.</u> To be in proper written form, a Nominating Shareholder’s notice to the Corporate Secretary must set forth the following information and include a certification by the Nominating Shareholder that all information contained in the Nominating Shareholder’s notice contains no untrue statement of material fact and does not omit to state a material fact that is required to be stated or that is necessary to make a statement not misleading in light of the circumstances in which it was made and a certification by the person that the Nominating Shareholder is proposing to nominate for election as a director (the “Proposed Nominee”) that the information in relation to him/her as contained in the Nominating Shareholder’s notice is true and accurate:

(i) as to each person whom the Nominating Shareholder proposes to nominate for election as a director:

A. the name, age, business address and residential address of the person;

B. the principal occupation or employment of the person for the most recent five years, and the name and principal business of any Company in which any such employment is carried on;

C. the citizenship and place of residence of such person;

D. the class or series and number of shares in the capital of the Corporation which are controlled or which are owned beneficially or of record by the person as of the record date for the Shareholders’ Meeting (if such date shall then have been made publicly available and shall have occurred) and as of the date of such notice;

E. any other information relating to the person that would be required to be disclosed in a dissident’s proxy circular in connection with solicitations of proxies for election of directors pursuant to the Act and Applicable Securities Laws; and

F. such person’s written consent to being named in the notice as a nominee and to serving as a director of the Corporation if elected.

(ii) as to the Nominating Shareholder giving the notice: (A) the name and address of such Nominating Shareholder, as they appear on the securities register of the Corporation; (B) the number of securities of each class or series of securities of the Corporation owned of record and beneficially by, or under the control or direction of, directly or indirectly, such Nominating Shareholder; (C) full particulars regarding any agreement, arrangement or understanding with respect to the nomination between or among such Nominating Shareholder, any of their respective affiliates or associates, and any others acting jointly or in concert with any of the foregoing, including the nominee; (D) full particulars regarding any agreement, arrangement or understanding (including any derivative or short positions, profit interests, options, warrants, convertible securities, stock appreciation or similar rights, hedging transactions, and borrowed or loaned shares) that has been entered into as of the date of the notice by, or on behalf of, such Nominating Shareholder, whether or not such instrument or right shall be subject to settlement in underlying securities of the Corporation, the effect or intent of which is to mitigate loss to, manage risk or benefit of share price changes for, or increase or decrease the voting power of, such Nominating Shareholder with respect to securities of the Corporation; (E) full particulars regarding any proxy, contract, agreement, arrangement or understanding pursuant to which such Nominating Shareholder has a right to vote or direct or control the voting of any securities of the Corporation; and (F) any other information relating to such Nominating Shareholder that would be required to be made in a dissident's proxy circular in connection with solicitations of proxies for election of directors pursuant to the Act and Applicable Securities Laws (as defined below).

A. The Corporation may require any proposed nominee to furnish such other information and documents as may reasonably be required by the Corporation to (A) determine the eligibility of such proposed nominee to serve as an independent director of the Corporation or that could be material to a reasonable shareholder's understanding of the independence and/or qualifications in respect of financial literacy, or lack thereof, of such proposed nominee, or (B) satisfy the requirements of the Act, the Applicable Securities Laws and applicable stock exchange rules.

B. In addition, a Nominating Shareholder's notice (including but not limited to related certification) shall be promptly updated and supplemented, if necessary, so that the information provided or required to be provided in such notice shall be true and correct as of the record date for the meeting.

(d) Eligibility for nomination. No person shall be eligible for election as a director of the Corporation unless nominated in accordance with the provisions of this Section 5.5; provided, however, that nothing in this Section 5.5 shall be deemed to preclude discussion by a shareholder (as distinct from the nomination of directors) at a Shareholders' Meeting of any matter in respect of which it would have been entitled to submit a proposal pursuant to the provisions of the Act or at the discretion of the Chair. The Chair of the meeting shall have the power and duty to determine whether a nomination was made in accordance with the procedures set forth in the By-laws and, if any proposed nomination is not in compliance with the By-laws, to declare that such defective nomination shall be disregarded.

(e) Notice. Notwithstanding any other provision of this By-law, a Nominating Shareholder's notice given to the Corporate Secretary of the Corporation pursuant to this By-law may only be given by personal delivery, facsimile transmission or by email (at such email address as may be stipulated from time to time by the Corporate Secretary of the Corporation for purposes of such notice), and shall be deemed to have been given and made only at the time it is served by personal delivery, email or sent by facsimile transmission (provided that receipt of confirmation of such transmission has been received) to the Corporate Secretary at the address of the principal executive office of the Corporation; provided that if such delivery or electronic communication is made on a day which is a not a Business Day or later than 5:00 p.m. (Eastern Standard Time) on a day which is a Business Day, then such delivery or electronic communication shall be deemed to have been made on the subsequent day that is a Business Day.

(f) Waiver of requirement. Notwithstanding any other provision in this Section 5.5, the Board may, in its sole discretion, waive any requirement in this Section 5.5.

(g) No right for inclusion of details in Management Proxy Circular of the Corporation. Compliance with the notice and nomination procedure set out in this section 5.5 shall not result in any obligation or requirement on the Corporation to include the name the person nominated by the Nominating Shareholder or any other information provided by such Nominating Shareholder in the management proxy circular for any Shareholders' Meeting or any other disclosure documents of the Corporation.

ARTICLE 6
BOARD MEETINGS

6.1 Meetings.

(a) Calling of Board Meeting. The Board shall meet at least annually and may meet more frequently as needed. Meetings of the Board may be called by the Chair of the Board, the Chief Executive Officer, or any two directors, as the case may be, and shall be held at such time, date and place as may be determined by the person calling the meeting, subject to the quorum requirements being satisfied.

(b) Notice of Board Meeting. Notice of each meeting of the Board shall be given to each director (i) not later than the day before the meeting if such notice is given by hand delivery or by means of a form of electronic document; (ii) at least two days before the meeting if such notice is sent by a nationally recognized overnight delivery service; and (iii) at least five days before the meeting if such notice is sent through ordinary mail. If the Corporate Secretary shall fail or refuse to give such notice, then the notice may be given by the individual(s) who called the meeting. Any director may at any time waive the provision of the notice in accordance with Article 11.

(c) Except as required by the Act, a notice of meeting need not specify the purpose of or the business to be transacted at the meeting.

(d) Notwithstanding Section 6.1(a), a special meeting may be held at any time without notice if all of the directors are present or if those not present waive notice of the meeting in accordance with Article 11.

6.2 Quorum

A majority of the members of the Board shall constitute a quorum for the transaction of business at any meeting of the Board, and the act of a majority of the directors present at any meeting at which there is a quorum shall be the act of the Board.

6.3 Adjournment

If a quorum shall not be present at any meeting, a majority of the directors present may adjourn the meeting from time to time, without notice other than the announcement at the meeting, of the time and place of the reconvening of the meeting, until a quorum is present.

6.4 Voting.

(a) No Tie-breaking vote. Each director is entitled to one vote on each matter. At all meetings of the Board every question will be decided by a majority of the votes cast on the question; if the Board considers any action that results in an equal number of the directors at the meeting voting for and against the action, then in such case, the Chair of the Board shall not be entitled to cast a tie-breaking vote with respect to such action.

(b) Electronic Voting. Subject to the Act, a director participating in a meeting by a telephonic, electronic or other communication facility may vote by any reasonable means (including verbal assent) given the nature of such communication facility.

6.5 **Organization.**

The Chair of each meeting of the Board shall be the Chair of the Board (or if such person is absent or unable to so act), the Chief Executive Officer (if he or she shall be a director) or, if such person is absent or unable to so act or if the Chief Executive Officer is not a director, a Chair elected from the directors present. The Corporate Secretary shall act as secretary of all meetings of the Board. If such person is absent (or unable to so act) an Assistant Secretary shall be appointed to act as secretary of a meeting of the Board by the Chair of the meeting. If such person is absent (or unable to so act) Chair of the meeting may appoint any person to act as secretary of the meeting.

6.6 **Action by the Board.**

The powers of the Board may be exercised at a meeting at which a quorum is present or by resolution in writing signed by all of the directors entitled to vote on that resolution at a meeting of the Board or a meeting of a committee of the Board, as applicable. That resolution may be signed in counterparts each consented to in writing by one or more directors or one or more members of a committee of the Board, as the case may be, which together shall be deemed to constitute one resolution. Where there is a vacancy on the Board, the remaining directors may exercise all the powers of the Board so long as a quorum remains in office.

6.7 **Delegation.**

Subject to the Act, the Board may from time to time delegate to a director, a committee of directors, an officer or such other person or persons so designated by the Board all or any of the powers conferred on the Board by the By-laws or by the Act to such extent and in such manner as the Board shall determine at the time of each such delegation.

ARTICLE 7
COMMITTEES OF DIRECTORS

7.1 **Establishment.**

The Board may designate one or more committees, each committee to consist of one or more of the directors. Each committee shall keep regular minutes of its meetings and report the same to the Board when required. The Board shall have the power at any time to fill vacancies in, change the membership of, or dissolve any such committee.

7.2 **Available Powers.**

Any committee established by the Board, subject to the limitations prescribed by applicable law or otherwise prescribed by the Board in that committee’s mandate or charter approved by the Board, shall have and may exercise all of the powers and authority of the Board in the management of the business and affairs of the Corporation, and may authorize the seal of the Corporation to be affixed to all papers that may require it.

7.3 **Alternate Members.**

The Board may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of such committee.

7.4 **Procedures.**

Unless the Board otherwise provides or as set out in that committee’s mandate or charter, the time, date, place, if any, and notice of meetings of a committee shall be determined by such committee.

Unless the Board otherwise provides and except as provided in this By-law, each committee designated by the Board may make, alter, amend and repeal rules for the conduct of its business. In the absence of such rules each committee shall, to the extent applicable, conduct its business in the same manner as the Board is authorized to conduct its business pursuant to Article 6 of this By-law.

ARTICLE 8
OFFICERS

Subject to the Act, the Board may designate the offices of the Corporation, appoint as officers persons of full capacity, specify their duties and delegate to them powers to manage the business and affairs of the Corporation.

ARTICLE 9
SHARES

9.1 **Registered Shareholders.**

The Corporation may, subject to the Act, treat a registered owner of shares of the Corporation as the person exclusively entitled to vote, receive notices, receive any interest, dividend or other payments, and otherwise to exercise all the rights and powers of an owner of such shares.

9.2 **Regulations.**

The Board shall have power and authority to make such additional rules and regulations, subject to any applicable requirement of law, as the Board may deem necessary and appropriate with respect to the issue, transfer or registration of transfer of shares of the Corporation or certificates representing shares of the Corporation.

9.3 **Transfer Agent and Registrar.**

The Board may appoint or remove a transfer agent or a registrar and one or more branch transfer agents or registrars for the shares of the Corporation.

ARTICLE 10
INDEMNIFICATION

10.1 **Indemnification.**

The Corporation shall indemnify a director or officer of the Corporation, a former director or officer of the Corporation or another individual who acts or acted at the Corporation's request as a director or officer, or an individual acting in a similar capacity, of another entity, to the fullest extent permitted by the Act and if the Corporation has entered into an indemnification agreement with any director or officer of the Corporation, the terms of such indemnification agreement will govern the indemnification arrangement by the Corporation for such director or officer.

10.2 **Limitation of Liability.**

To the extent permitted by law, no director or officer shall be liable for:

(a) the acts, receipts, neglects or defaults of any other director, officer, employee or agent of the Corporation or any other person;

(b) any loss, damage or expense happening to the Corporation through the insufficiency or deficiency of title to any property acquired by, for, or on behalf of the Corporation, or for the insufficiency or deficiency of any security in or upon which any of the moneys of the Corporation shall be loaned out or invested;

(c) any loss or damage arising from the bankruptcy, insolvency or tortious act of any person, firm or corporation, including any person, firm or corporation with whom any moneys, securities or other assets belonging to the Corporation shall be lodged or deposited;

(d) any loss, conversion, misapplication or misappropriation of or any damage resulting from any dealings with any moneys, securities or other assets belonging to the Corporation; or

(e) any other loss, damage or misfortune whatever which may happen in the execution of the duties of the director's or officer's respective office or in relation thereto,

unless the same shall happen by or through the director's or officer's failure to exercise the powers and to discharge the duties of the director's or officer's office honestly and in good faith with a view to the best interests of the Corporation, provided that nothing herein contained shall relieve a director or officer from the duty to act in accordance with the Act or relieve such director or officer from liability for a breach of the Act. If the Act is hereafter amended to authorize corporate action further limiting or eliminating the liability of directors and officers, then the liability of a director or officer of the Corporation shall be limited or eliminated to the fullest extent permitted by the Act, as so amended. Any repeal or amendment of this Article 10 by the shareholders of the Corporation or by changes in law, or the adoption of a new by-law inconsistent with this Article 10 shall, unless otherwise required by law, be prospective only (except to the extent such amendment or change in law permits the Corporation to further limit or eliminate the liability of directors) and shall not adversely affect any right or protection of a director of the Corporation existing at the time of such repeal or amendment or adoption of such inconsistent provision with respect to acts or omissions occurring prior to such repeal or amendment or adoption of such inconsistent provision.

10.3 **Indemnification of Others.**

Subject to the Act, the Corporation may, to the extent authorized from time to time by the Board, indemnify and advance expenses to such other persons as the Board may determine.

10.4 **Insurance.**

Subject to the Act, the Corporation may, to the extent authorized from time to time by the Board, purchase and maintain insurance for the benefit of any persons as the Board may from time to time determine:

10.5 **Indemnities Not Exclusive.**

Each of the provisions of this Article 10 shall be in addition to and not in substitution for or derogation from any rights to which any director or officer of the Corporation, former director or officer of the Corporation or any individual who acts or acted at the Corporation's request as a director or officer, or any individual acting in a similar capacity, of another entity, may otherwise be entitled.

ARTICLE 11
NOTICES

A notice or document required by the Act, the Articles or the By-laws to be sent to a shareholder, director, officer, auditor or member of a committee of the Board may be:

(a) sent by prepaid mail or delivered personally to such person; or

(b) sent, delivered or provided by electronic means to such person to the extent permitted by the Act.

ARTICLE 12
BORROWING AND BANKING POWERS

12.1 **Banking Arrangements.**

The banking business of the Corporation, or any part or division of the Corporation, shall be transacted with such bank, trust company or other firm or body corporate as the Board may designate, appoint or authorize from time to time and all such banking business, or any part thereof, shall be transacted on the Corporation's behalf by such one or more officers or other persons as the Board may designate, direct or authorize from time to time and to the extent thereby provided.

12.2 **Borrowing.**

(a) Borrowing. Without limiting the general powers of the Board as provided in the Act and in the By-laws, the Board may from time to time, without authorization of the shareholders, on behalf of the Corporation:

(i) borrow money on the credit of the Corporation;

(ii) issue, reissue, sell, pledge or hypothecate debt obligations of the Corporation;

(iii) give a guarantee on behalf of the Corporation to secure performance of an obligation of any person; and

(iv) mortgage, hypothecate, pledge or otherwise create a security interest in all or any property of the Corporation, owned or subsequently acquired, to secure any obligation of the Corporation.

ARTICLE 13
MISCELLANEOUS

13.1 **Dividends.**

(a) Subject to the Act, the Board may from time to time declare, and the Corporation may pay, dividends (payable in cash, property, fully paid shares of the Corporation or such other form as the Board may determine) to the shareholders.

(b) Any dividend unclaimed after a period of two years from the date on which the dividend has been declared to be payable shall be forfeited and shall revert to the Corporation.

13.2 **Financial Year.**

The financial year of the Corporation shall be fixed by the Board.

13.3 **Seal.**

The Corporation may have a seal which shall be in such form as shall from time to time be adopted by the Board. The seal may be used by causing it or a facsimile thereof to be impressed, affixed or otherwise reproduced.

13.4 **Books and Records.**

The books and records of the Corporation shall be at the registered office of the Corporation or at such place or places in Canada as may from time to time be designated by the Board.

13.5 **Securities of Other Corporations.**

Powers of attorney, proxies, waivers of notice of meeting, consents in writing and other instruments relating to securities owned by the Corporation may be executed in the name of and on behalf of the Corporation by the Chair of the Board, the Chief Executive Officer, the Chief Financial Officer, the General Counsel, the Corporate Secretary or any Vice President. Any such officer, may, in the name of and on behalf of the Corporation, take all such action as any such officer may deem advisable to vote in person or by proxy at any meeting of security holders of any corporation in which the Corporation may own securities, or to consent in writing, in the name of the Corporation as such holder, to any action by such corporation, and at any such meeting or with respect to any such consent shall possess and may exercise any and all rights and power incident to the ownership of such securities and which, as the owner thereof, the Corporation might have exercised and possessed. The Board may from time to time confer like powers upon any other person or persons.

13.6 **Execution of Instruments.**

Unless otherwise authorized by the Board, deeds, transfers, assignments, contracts, obligations, certificates and other instruments may be signed on behalf of the Corporation by any director or officer of the Corporation. Any signing officer may affix the corporate seal to any instrument requiring the same, but no instrument is invalid merely because the corporate seal is not affixed thereto.

Notwithstanding the foregoing, the Board may from time to time direct the manner in which, and the person or persons by whom, any particular instrument or class of instruments may or shall be signed.

13.7 **Omissions and Errors.**

The accidental omission to give any notice to any shareholder, director, officer, auditor or member of a committee of the Board or the non-receipt of any notice by such person or any error in any notice not affecting the substance thereof shall not invalidate any action taken at any meeting held pursuant to the notice or otherwise founded thereon.

13.8 **Persons Entitled by Death or Operation of Law.**

Every person who, by operation of law, transfer, death of a shareholder or any other means whatsoever, shall become entitled to any share shall be bound by every notice in respect of the share which shall have been duly given to the shareholder from whom he derives his title to the share prior to his name and address being entered on the securities register (whether the notice was given before or after the happening of the event upon which he became so entitled) and prior to his furnishing to the Corporation the proof of authority or evidence of his entitlement prescribed by the Act.

13.9 **Invalidity.**

The invalidity or unenforceability of any provision of this By-law No. 1 shall not affect the validity or enforceability of the remaining provisions of this By-law No. 1.

13.10 **EffectiveDate.**

This By-law No. 1 shall come into force upon approval by the Board or on a future date as specified by the Board upon approval of this By-law No. 1.

13.11 **Repeal.**

All previous by-laws of the Corporation which are inconsistent with this By-law No. 1 are repealed as of the coming into force of this By-law No. 1. Such repeal shall not affect the previous operation of any by-law so repealed or affect the validity of any act done or right, privilege, obligation or liability acquired or incurred under, or the validity of any contract or agreement made pursuant to, or the validity of any articles or predecessor charter documents of the Corporation obtained pursuant to, any such by-law prior to its repeal. All officers and persons acting under any by-law so repealed shall continue to act as if appointed under the provisions of this By-law No. 1 and all resolutions of the shareholders or the Board or a committee of the Board with continuing effect passed under any repealed by-law shall continue good and valid except to the extent inconsistent with this By-law No. 1 and until amended or repealed.

The foregoing Amended and Restated By-law No. 1 is made a by-law of the Corporation by the Board of directors as of __________.

____

Chief Executive Officer

Exhibit 10.8

2014 EQUITY INCENTIVE PLAN
XENON PHARMACEUTICALS INC.

ARTICLE 1
PURPOSE

1.1 The purpose of this Plan is to promote the interests of Xenon Pharmaceuticals Inc. (the "**Company**") by:

(a) furnishing certain directors, officers, employees of the Company and its subsidiaries or other persons as the Board of Directors may approve with greater incentive to further develop and promote the business and financial success of the Company;

(b) furthering the identity of interests of persons to whom options or share awards may be granted with those of the shareholders of the Company generally through share ownership in the Company; and

(c) assisting the Company in attracting, retaining and motivating its directors, officers and employees.

The Company believes that these purposes may best be effected by granting Options or Share Awards to acquire Common Shares without par value in the capital of the Company.

ARTICLE 2
INTERPRETATION

2.1 In this Plan, unless there is something in the subject matter or context inconsistent therewith:

(a) "**Affiliate**" has the meaning ascribed thereto under the *Canada Business Corporations Act* as from time to time amended, supplemented or re-enacted;

(b) "**Award**" means, individually or collectively, an award of Options, an award of Share Appreciation Rights, Restricted Share Award, Restricted Share Unit Award, or any Performance Share Award granted under the Plan;

(c) "**Award Agreement**" means the written or electronic agreement setting forth the terms and provisions applicable to each Award granted under the Plan. The Award Agreement is subject to the terms and conditions of the Plan;

(d) "**Blackout Period**" means any period during which a Participant is prevented from trading the Common Shares pursuant to a policy of the Company, including but not limited to the Company's insider trading policy, as amended and in force from time to time, any lockup or similar agreement described in the First Registration Statement, and any lockup or similar agreement between the Company and a third party restricting the trading of Common Shares;

(e) "**Board of Directors**" means the board of directors of the Company;

(f) "**Business Day**" means a day, other than Saturday, Sunday and any other day which is a statutory holiday in British Columbia Canada or New York U.S.A.;

(g) “**Cause**” with respect to any Participant, shall mean (i) a Participant’s willful misconduct, (ii) a willful failure of a Participant to perform his or her duties, (iii) a Participant’s insubordination, theft, dishonesty, or any other willful conduct that is detrimental to the Company or its subsidiaries, (iv) cause for termination of employment or other service contract at common law, or (v) such other cause as the Board of Directors in good faith reasonably determines provides cause for the discharge of the Participant or termination of the Participant’s relationship with the Company;

(h) “**Change of Control**” means:

(i) the acquisition by any person or persons acting jointly or in concert (as determined by the Securities Act) (“**Person**”), whether directly or indirectly, of voting securities of the Company that, together with all other voting securities of the Company held by such Person, constitute in the aggregate more than 50% of all outstanding voting securities of the Company; provided, however, that for purposes of this subsection, the acquisition of additional securities by any one Person, who is considered to own more than 50% of all outstanding voting securities of the Company will not be considered a Change of Control;

(ii) an amalgamation, arrangement or other form of business combination of the Company with another corporation that results in the holders of voting securities of that other corporation holding, in the aggregate, more than 50% of all outstanding voting securities of the corporation resulting from the business combination; provided, however, that for purposes of this subsection, the acquisition of additional securities by any one Person, who is considered to own more than 50% of all outstanding voting securities of the Company will not be considered a Change of Control;

(iii) a change in the ownership of a substantial portion of the Company’s assets which occurs on the date that any Person acquires (or has acquired during the twelve (12) month period ending on the date of the most recent acquisition by such person or persons) assets from the Company that have a total gross fair market value equal to or more than fifty percent (50%) of the total gross fair market value of all of the assets of the Company immediately prior to such acquisition or acquisitions; provided, however, that for purposes of this subsection (iii), the following will not constitute a change in the ownership of a substantial portion of the Company’s assets: (A) a transfer to a Related Entity, or (B) a transfer of assets by the Company to: (1) a stockholder of the Company (immediately before the asset transfer) in exchange for or with respect to the Company’s stock, (2) an entity of which the Company has Control, (3) a Person, that owns, directly or indirectly, fifty percent (50%) or more of the total value or voting power of all the outstanding stock of the Company, or (4) an entity of which a Person described in this subsection (iii)(B)(3) has Control. For purposes of this subsection (iii), gross fair market value means the value of the assets of the Company, or the value of the assets being disposed of, determined without regard to any liabilities associated with such assets; or

(iv) any other transaction that is deemed to be a “Change of Control” for the purposes of this Plan by the Board of Directors, in its sole discretion;

Notwithstanding the foregoing, a transaction will not be deemed a Change of Control for Awards granted to Participants who are subject to U.S. taxation unless the transaction qualifies as a Change of Control event within the meaning of Code Section 409A, as it has been and may be amended from time to time, and any proposed or final Treasury Regulations and U.S. Internal Revenue Service guidance that has been promulgated or may be promulgated thereunder from time to time.

Further and for the avoidance of doubt, a transaction will not constitute a Change of Control if: (x) its sole purpose is to change the state or jurisdiction of the Company’s incorporation, or (y) its sole purpose is to create a holding company that will be owned in substantially the same proportions by the persons who held the Company’s securities immediately before such transaction.

(i) “**CEO**” means the Chief Executive Officer of the Company;

(j) "**Code**" means the U.S. Internal Revenue Code of 1986, as amended. Reference to a specific section of the Code or regulation thereunder shall include such section or regulation, any valid regulation promulgated under such section, and any comparable provision of any future legislation or regulation amending, supplementing or superseding such section or regulation;

(k) "**Committee**" means a committee of directors or of other individuals satisfying applicable laws appointed by the Board of Directors, or a duly authorized committee of the Board of Directors, in accordance with Article 3 hereof;

(l) "**Common Shares**" means the common shares without par value in the capital of the Company;

(m) "**Consultant**" means a person other than an employee, officer or director of the Company or of any of its subsidiaries that:

(i) is engaged to provide services to the Company or any of its subsidiaries;

(ii) provides the services under a written contract with the Company or of any of its subsidiaries; and

(iii) spends or will spend a significant amount of time and attention on the affairs and business of the Company or of any of its subsidiaries,

and includes, for an individual Consultant, a corporation of which such individual is an employee or shareholder;

(n) "**Control**" by a person over a second person means the power to direct, directly or indirectly, the management and policies of the second person by virtue of:

(i) ownership of or direction over voting securities in the second person;

(ii) a written agreement or indenture;

(iii) being or Controlling the general partner of the second person; or

(iv) being a trustee of the second person;

(o) "**Effective Date**" has the meaning under paragraph 11.1 of the Plan.

(p) "**Eligible Persons**" means directors, officers, employees or Consultants of the Company or of any of its subsidiaries, and an "**Eligible Person**" shall have a corresponding meaning;

(q) "**Exchange Act**" means the U.S. Securities Exchange Act of 1934, as amended;

(r) "**Exchange Program**" means a program under which (i) outstanding Awards are surrendered or cancelled in exchange for awards of the same type (which may have higher or lower exercise prices and different terms), awards of a different type, and/or cash, (ii) Participants would have the opportunity to transfer any outstanding Awards to a financial institution or other person or entity selected by the Board of Directors, and/or (iii) the exercise price of an outstanding Award is increased or reduced. The Board of Directors will determine the terms and conditions of any Exchange Program, in its sole discretion;

(s) "**Exercise Price**" means the price per share at which Common Shares may be subscribed for by a Participant pursuant to a particular Share Option Agreement, as further described under paragraph 7.1(c) of the Plan;

(t) “**Fair Market Value Price**” means, as of any date, the value of Common Shares determined as follows:

(i) if the Common Shares are listed on a Stock Exchange, its Fair Market Value Price will be the closing sales price for such stock (or the closing bid, if no sales were reported) as quoted on such exchange or system on the day of determination, as reported in such other source as the Board of Directors deems reliable;

(ii) if the Common Shares are regularly quoted by a recognized securities dealer but selling prices are not reported, the Fair Market Value Price of a Common Share will be the mean between the high bid and low asked prices for the Common Shares on the day of determination (or, if no bids and asks were reported on that date, as applicable, on the last trading date such bids and asks were reported), as reported in such source as the Board of Directors deems reliable;

(iii) for purposes of any Awards granted on the Registration Date, the Fair Market Value Price will be the initial price to the public as set forth in the final prospectus included within the registration statement on Form S-1 filed with the U.S. Securities and Exchange Commission for the initial public offering of the Company’s Common Shares; or

(iv) in the absence of an established market for the Common Shares, the Fair Market Value Price will be determined in good faith by the Board of Directors.

Notwithstanding the foregoing, if the determination date for the Fair Market Value Price occurs on a day other than a Business Day, the Fair Market Value Price will be the price as determined in accordance with subsections (i) through (iv) above (as applicable) on the next Business Day, unless otherwise determined by the Board of Directors;

(u) “**First Registration Statement**” means the first registration statement that is filed by the Company and declared effective pursuant to Section 12(g) of the Exchange Act, with respect to any class of the Company’s securities;

(v) “**Fiscal Year**” means the fiscal year of the Company;

(w) “**Incentive Share Option**” means an Option to purchase Common Shares with the intention that it qualify as an “**incentive stock option**” within the meaning of Section 422 of the Code and the regulations and guidance promulgated thereunder, such intention being evidenced by the resolutions of the directors at the time of grant;

(x) “**Insider**” has the meaning given to that term in the Securities Act and also includes associates and affiliates of the Insider, but does not include directors or senior officers of a subsidiary or affiliate of the Company unless such director or senior officer:

(i) in the ordinary course receives or has access to information as material facts or material changes concerning the Company before the material facts or material changes are generally disclosed;

(ii) is a director or senior officer of a “major subsidiary” of the Company (where “major subsidiary” has the meaning given to that term in National Instrument 55-101 – Insider Reporting Exemptions); or

(iii) is an insider of the Company in a capacity other than as a director or senior officer of the subsidiary or affiliate.

For the purpose of this definition, the terms “affiliate”, “associate” and “subsidiary” have the meanings given to them, respectively, in the Securities Act;

(y) “**NI 45-106**” means National Instrument 45-106 – Prospectus and Registration Exemptions;

(z) “**Optioned Shares**” means the Common Shares that may be subscribed for by a Participant pursuant to a Share Option Agreement;

(aa) “**Options**” means share options granted hereunder to purchase Common Shares from treasury;

(bb) “**Outside Director**” means a director who is not an employee (including officer) of the Company or an Affiliate;

(cc) “**Nonqualified Share Option**” means an Option to purchase Common Shares other than an Incentive Share Option;

(dd) “**Participant**” means an Eligible Person to whom an Award is granted pursuant to the Plan or, if applicable, such other person who holds an outstanding Award;

(ee) “**Performance Criteria**” means the one or more criteria that the Board of Directors shall select for purposes of establishing the performance goals for a Performance Period;

(ff) “**Performance Period**” means one or more periods of time, which may be of varying and overlapping duration, as the Board of Directors may select, over which the attainment of one or more performance goals will be measured for the purpose of determining a Participant’s right to, and the payment of, a Performance Share Award.

(gg) “**Performance Share Award**” means an award of Common Shares which is granted pursuant to the terms and conditions of Article 9;

(hh) “**Plan**” means this 2014 Equity Incentive Plan, as the same may from time to time be supplemented, amended and/or restated and in effect;

(ii) “**Registration Date**” means the effective date of the First Registration Statement;

(jj) “**Related Entity**” means, for a company or corporation, a Person that Controls or is Controlled by the Company or that is Controlled by the same Person that controls that company or corporation;

(kk) “**Restricted Share Award**” means an award of Common Shares which is granted pursuant to the terms and conditions of Article 9;

(ll) “**Restricted Share Unit Award**” means a bookkeeping entry representing an amount equal to the Fair Market Value of one Common Share, granted pursuant to the terms and conditions of Article 9;

(mm) “**Retirement**” means retirement as an employee and/or officer of the Company, and if there is any question on whether a cessation of employment is by way of a retirement or not, the determination by the CEO (or in the CEO’s absence or in the case of a situation involving the cessation of employment of an executive officer of the Company, the Compensation Committee of the Board of Directors or the independent members of the Board of Directors) shall be conclusive and binding on the Participant;

(nn) “**Rule 16b-3**” means Rule 16b-3 of the Exchange Act or any successor to Rule 16b-3, as in effect when discretion is being exercised with respect to the Plan.

(oo) “**Section 16(b)**” means Section 16(b) of the Exchange Act;

(pp) “**Securities Act**” means the *Securities Act* (British Columbia);

(qq) “**Share Appreciation Right**” means a right to receive the appreciation on Common Shares that is granted pursuant to the terms and conditions of Article 9;

(rr) “**Share Award**” means any Restricted Share Award, Restricted Share Unit Award, Share Appreciation Right, Performance Share Award, or any Other Share Award granted under the Plan;

(ss) “**shareholder approval**” means the approval as evidenced by a resolution passed by a simple majority of votes cast at a meeting of holders of Common Shares (unless required by the Stock Exchanges to exclude the votes cast by Insiders in relation to amendments benefiting Insiders);

(tt) "**Stock Exchanges**" means such stock exchanges or other organized market on which the Common Shares are listed or posted for trading, including the NASDAQ Stock Market LLC;

(uu) "**subsidiary**" has the meaning assigned thereto under the Securities Act (British Columbia) as the same may from time to time be amended or re-enacted; and

(vv) "**Trading Day**", with respect to any Stock Exchange, means a day on which securities may be traded through the facilities of such Stock Exchange.

2.2 Any question arising as to the interpretation of this Plan will be determined by the Board of Directors and, absent manifest error, such determination will be conclusive and binding on the Company and all Participants.

2.3 In this Plan, words importing the singular number only include the plural and *vice versa*, words importing any gender include all genders and words importing persons include individuals, corporations, limited and unlimited liability companies, general and unlimited partnerships, associations, trusts, incorporated organizations, joint ventures and governmental authorities.

ARTICLE 3
ADMINISTRATION OF PLAN

3.1 This Plan will be administered by the Board of Directors. The Board of Directors may delegate some or all of the administration of the Plan to a Committee or Committees. If administration of the Plan is delegated to a Committee, the Committee will have, in connection with the administration of the Plan, the powers theretofore possessed by the Board of Directors that have been delegated to the Committee, including the power to delegate to a subcommittee of the Committee any of the administrative powers the Committee is authorized to exercise (and references in this Plan to the Board of Directors will thereafter be to the Committee or subcommittee, as applicable). Any delegation of administrative powers will be reflected in resolutions, not inconsistent with the provisions of the Plan, adopted from time to time by the Board of Directors or the Committee (as applicable). The Board of Directors may retain the authority to concurrently administer the Plan with the Committee and may, at any time, revest to the Board of Directors some or all of the powers previously delegated. For the purpose of delegation of administration of the Plan, one or more of the CEO and/or officers of the Company, if designated by the Board of Directors, will be deemed a Committee.

3.2 To the extent that the Board of Directors determines it to be desirable to qualify Awards granted hereunder as "performance-based compensation" within the meaning of Section 162(m) of the Code, the Plan will be administered by a Committee of two (2) or more "outside directors" within the meaning of Section 162(m) of the Code. To the extent desirable to qualify transactions hereunder as exempt under Rule 16b-3, the transactions contemplated hereunder will be structured to satisfy the requirements for exemption under Rule 16b-3.

3.3 The Board of Directors will take such steps which in its opinion are required to ensure that the Committee to which it has delegated the power to ensure that it has the necessary authority to fulfill its functions under this Plan.

3.4 Subject to the provisions of the Plan, the Board of Directors, and in the case of a Committee, subject to the specific duties delegated by the Board of Directors to such Committee, will have the authority, in its discretion:

(a) to determine the Fair Market Value;

(b) to select the Eligible Persons to whom Awards may be granted hereunder;

(c) to determine the number of Shares to be covered by each Award granted hereunder;

(d) to approve forms of Award Agreements for use under the Plan;

(e) to determine the terms and conditions, not inconsistent with the terms of the Plan, of any Award granted hereunder. Such terms and conditions include, but are not limited to, the exercise price, the time or times when Awards may be exercised (which may be based on performance criteria), any vesting acceleration or waiver of forfeiture restrictions, and any restriction or limitation regarding any Award or the Shares relating thereto, based in each case on such factors as the Board of Directors (or Committee appointed by the Board of Directors) will determine;

(f) to institute and determine the terms and conditions of an Exchange Program;

(g) to construe and interpret the terms of the Plan and Awards granted pursuant to the Plan;

(h) to prescribe, amend and rescind rules and regulations relating to the Plan, including rules and regulations relating to sub-plans established for the purpose of satisfying applicable foreign laws or for qualifying for favorable tax treatment under applicable foreign laws;

(i) to modify or amend each Award (subject to Article 11 of the Plan), including but not limited to the discretionary authority to extend the post-termination exercisability period of Awards and to extend the maximum term of an Option (subject to paragraph 8.1(d) of the Plan regarding Incentive Share Options);

(j) to allow to satisfy withholding tax obligations in such manner as prescribed in paragraph 10.7 of the Plan;

(k) to authorize any person to execute on behalf of the Company any instrument required to effect the grant of an Award previously granted by the Board of Directors;

(l) to allow a Participant to defer the receipt of the payment of cash or the delivery of Shares that would otherwise be due to such Participant, as applicable, under an Award; and

(m) to make all other determinations deemed necessary or advisable for administering the Plan.

3.5 The Board of Directors has the authority to determine all questions arising out of the Plan and any Award granted pursuant to the Plan, which interpretations and determinations will be conclusive and binding on the Company and all other affected persons.

ARTICLE 4
REGULATIONS

4.1 The Board of Directors may from time to time establish such regulations, make such determinations and interpretations and take such steps in connection with this Plan which, in its opinion, are necessary or desirable for the administration of this Plan.

ARTICLE 5
COMPLIANCE WITH LAWS

5.1 The Plan, the grant, exercise, vesting, and/or settlement of Awards under the Plan and the Company's obligation to issue Common Shares on exercise, vesting, or settlement of Awards will be subject to all applicable federal, provincial and foreign laws, rules and regulations and the rules of any regulatory authority or Stock Exchange on which the securities of the Company are listed. The Company shall not be required, or in any way obliged, to grant Awards or issue Common Shares if such grant or issuance would require registration of the Plan or of any Awards or Common Shares under the securities laws of any jurisdiction other than Canada or the United States. Common Shares issued to a Participant pursuant to the exercise, vesting, or settlement of an Award may be subject to limitations on sale or resale under applicable securities laws.

5.2 The Board of Directors may from time to time take such steps and require such documentation from Eligible Persons or Participants which in its opinion are necessary or desirable to ensure compliance with all applicable laws, the bylaws, rules and regulations of any Stock Exchanges.

5.3 The Board of Directors may also from time to time take such steps which in its opinion are necessary or desirable to restrict the transferability of any Common Shares acquired on the exercise, vesting, or settlement of any Award in order to ensure such compliance, including, where applicable, the endorsement of a legend on any certificate representing Common Shares acquired on the exercise, vesting, or settlement of any Award to the effect that such Common Shares may not be offered, sold or delivered except in compliance with the applicable securities laws and regulations of Canada or the United States.

ARTICLE 6
COMMON SHARES SUBJECT TO PLAN

6.1 Subject to adjustment provided for herein, and the annual increase provided for below, the initial number of Common Shares that may be issued pursuant to the Plan for the period from the Effective Date will be 2,000,000 Common Shares (the "**Share Reserve**"). In addition, the Share Reserve will increase on the first Business Day of each of the Fiscal Years (without the approval of the Company's shareholders), commencing on January 1, 2015, by an amount which shall be determined by the Board of Directors on or before the first Business Day of each Fiscal Year, such amount to be equal to the least of (i) 5,000,000 Common Shares, (ii) 4% of the outstanding Common Shares on the last Business Day of the immediately preceding Fiscal Year, or (iii) such number of Common Shares determined by the Board of Directors.

6.2 The Board of Directors will reserve for allotment from time to time out of the authorized but unissued Common Shares sufficient Common Shares to provide for issuance of all Common Shares which are issuable under all outstanding Options or Share Awards.

6.3 Upon the expiry or termination of an Award which has not been exercised in full, is surrendered pursuant to an Exchange Program, or, with respect to a Restricted Share Award, Restricted Share Unit Award, or Performance Share Award is forfeited to or repurchased by the Company due to failure to vest, the number of unpurchased Common Shares reserved for issuance under that Award (or for Awards other than Options or Share Appreciation Rights the forfeited or repurchased Common Shares) shall become available for issue for the purpose of additional Awards which may be granted under this Plan (unless the Plan has terminated). With respect to Share Appreciation Rights, only Common Shares actually issued (i.e., the net Common Shares issued) pursuant to a Share Appreciation Right will cease to be available under the Plan; all remaining Common Shares under Share Appreciation Rights will remain available for future grant or sale under the Plan (unless the Plan has terminated). Common Shares that have actually been issued under the Plan under any Award will not be returned to the Plan and will not become available for future distribution under the Plan; provided, however, that if Shares issued pursuant to Restricted Share Awards, Restricted Share Unit Awards, or Performance Share Awards are repurchased by the Company or are forfeited to the Company, such Common Shares will become available for future grant under the Plan. Common Shares used to pay the exercise price of an Award or to satisfy the tax withholding obligations related to an Award will become available for future grant or sale under the Plan. To the extent an Award under the Plan is paid out in cash rather than Common Shares, such cash payment will not result in reducing the number of Common Shares available for issuance under the Plan. Notwithstanding the foregoing and, subject to adjustment as provided in paragraph 10.3, the maximum number of Common Shares that may be issued upon the exercise of Incentive Share Options will equal the aggregate Common Share number stated in the first sentence of paragraph 6.1, plus, to the extent allowable under Section 422 of the Code and the Treasury Regulations promulgated thereunder, any Common Shares that become available for issuance under the Plan pursuant to the first sentence of paragraph 6.1 and this paragraph 6.3.

6.4 Participation in this Plan will be entirely voluntary and any decision not to participate will not affect an Eligible Person's employment or other service relationship with the Company or any Related Entity.

6.5 Nothing in this Plan or in any Award Agreement will confer on any Participant any right to remain as an employee, officer, director or Consultant of the Company or any Related Entity.

6.6 Nothing herein or otherwise shall be construed so as to confer on any Participant any rights as a shareholder of the Company with respect to any Common Shares reserved for the purpose of any Award.

6.7 A Participant will only have rights as a shareholder of the Company with respect to Shares that the Participant acquires through the exercise of an Option in accordance with its terms.

6.8 A holder of a Share Award will only have rights as a shareholder of the Company with respect to the Common Shares subject to the Share Award as specified and subject to restrictions as set out in the relevant agreement evidencing such Share Award.

ARTICLE 7
GRANT OF OPTIONS

7.1 Subject to the rules set out below, the Board of Directors may from time to time grant to any Eligible Person one or more Options as the Board of Directors deems appropriate:

(a) **Date Option Granted.** The date on which an Option will be deemed to have been granted under this Plan will be the date on which the Board of Directors authorizes the grant of such Option or such other date as may be specified by the Board of Directors at the time of such authorization.

(b) **Number of Common Shares.** The number of Common Shares that may be purchased under any Option by a Participant will be determined by the Board of Directors provided that such number may not be greater than the maximum number permitted under the applicable rules and regulations of all regulatory authorities to which the Company is subject, including the Stock Exchanges. A Participant, at the time of granting an Option, may hold more than one Option.

(c) **Exercise Price.** The exercise price (the "**Exercise Price**") per Common Share under each Option will be determined by the Board of Directors by reference to the fair market price(s) of the Common Shares on the primary Stock Exchange for which most trading of the Common Shares occurs, generally by reference to the closing market price of the Common Shares, provided that such price may not be less than the lowest price permitted under the applicable rules and regulations of all regulatory authorities to which the Company is subject, including those of the Stock Exchanges. Notwithstanding the foregoing, in the case of a Nonqualified Share Option or Incentive Share Option, the Exercise Price will be no less than one hundred percent (100%) of the Fair Market Value Price per Common Share on the date of grant, subject to the limitations applicable to Incentive Share Options set forth in paragraph 8.1(b) of the Plan. Notwithstanding the foregoing, Options may be granted with a per Share exercise price of less than one hundred percent (100%) of the Fair Market Value Price per Common Share on the date of grant pursuant to a transaction described in, and in a manner consistent with, Section 424(a) of the Code.

(d) **Award Agreement.** Each Option will be evidenced by an Award Agreement, which incorporates such terms and conditions as the Board of Directors, in its discretion, deems appropriate and consistent with the provisions of this Plan. Each Award Agreement will be executed by the Eligible Person to whom the Option is granted and on behalf of the Company by any member of the Board of Directors, the CEO or the Corporate Secretary of the Company or such other person as the Board of Directors may designate for such purpose.

(e) **Expiry of Options.** Each Option will expire on the earlier of:

(i) the date determined by the Board of Directors and specified in the Award Agreement pursuant to which such Option is granted, provided that such date may not be later than the earlier of (A) the date which is the tenth anniversary of the date on which such Option is granted (except (1) in the circumstances where the tenth anniversary falls within, or within five Business Days after, the end of a Blackout Period, then instead of the tenth anniversary, the relevant date shall be the fifth Business Day after the end of such Blackout Period; provided, however, that the extension in this subsection 7(e)(i)(A)(1) shall be applied to any Option held by a Participant who is a U.S. taxpayer only to the extent that it would not violate Code Section 409A and (2) in the circumstances described in paragraph 8.1(b) of the Plan) and (B) the latest date permitted under the applicable rules and regulations of all regulatory authorities to which the Company is subject, including the Stock Exchanges;

(ii) in the event the Participant ceases to be an Eligible Person for any reason, other than death of the Participant, such period of time after the date on which the Participant ceases to be an Eligible Person as may be specified by the Board of Directors, which period may be specified in the specific Award Agreement with respect to such Option (but in no event granted beyond the original expiry date of the Option as provided for in subparagraph (i) above). In the absence of a specified time in the Award Agreement, the Option will remain exercisable for 90 days following the date the Participant ceases to be an Eligible Person due to termination without Cause or resignation (or 180 days following the date Participant ceases to be an Eligible Person due to such Participant's Retirement, 365 days following the date Participant ceases to be an Eligible Person due to such Participant's disability, and immediately upon Participant ceasing to be an Eligible Person due to the termination of such Participant as an Eligible Person for Cause). Unless otherwise provided by the Board of Directors, if on the date the Participant ceases to be an Eligible Person, the Participant is not vested as to his or her entire Option, the Common Shares covered by the unvested portion of the Option will revert to the Plan. If after the date the Participant ceases to be an Eligible Person, the Participant does not exercise his or her Option within the time specified by the Board of Directors, the Option will terminate, and the Common Shares covered by such Option will revert to the Plan;

(iii) in the case of the death of a Participant prior to: (A) the Participant ceasing to be an Eligible Person; or (B) the date which is the number of days determined under subparagraph (ii) above, from the date on which the Participant ceased to be an Eligible Person; the date which is the 365th day after the date of death of such Participant or such other date as may be specified by the Board of Directors and which period will be specified in the Award Agreement with respect to such Option (but in no event beyond the original expiry date of the Option as provided for in subparagraph (i) above). Unless otherwise provided by the Board of Directors, if at the time of death Participant is not vested as to his or her entire Option, the Common Shares covered by the unvested portion of the Option will immediately revert to the Plan. If the Option is not so exercised within the time specified herein, the Option will terminate, and the Common Shares covered by such Option will revert to the Plan;

(iv) notwithstanding the foregoing provisions of subparagraphs (ii) and (iii) of this paragraph 7.1(e), the Board of Directors may, subject to regulatory approval, at any time prior to expiry of an Option extend the period of time within which an Option held by a deceased Participant may be exercised or within which an Option may be exercised by an Participant who has ceased to be an Eligible Person, but such an extension shall not be granted beyond the original expiry date of the Option as provided for in subparagraph (i) above; and

(v) notwithstanding the foregoing provisions, if the expiry of an Option pursuant to subparagraphs (ii) and (iii) of this paragraph 7.1(e) occurs during the Blackout Period applicable to the Participant or within five Business Days after the last day of a Blackout Period applicable to the Participant, the expiry date for the Option will be the last day of such five Business Day period, except in the event of expiry of Options following termination of a Participant's employment or services (for a director) or contract as a Consultant for Cause.

(f) **Exercise of Options.**

(i) The Board of Directors may impose such limitations or conditions on the exercise or vesting of any Option as the Board of Directors, in its discretion, deems appropriate. Each Award Agreement will provide that the Option granted thereunder may be exercised by notice signed by the Participant and accompanied by full payment for the Common Shares being purchased or by other means, including without limitation electronic means via on-line arrangements, as the Board of Directors may from time to time approve and allow.

(ii) The Board of Directors will determine the acceptable form of consideration for exercising an Option, including the method of payment. In the case of an Incentive Stock Option, the Board of Directors will determine the acceptable form of consideration at the time of grant. Such consideration may consist entirely of: (A) cash; (B) cheque; (C) other Common Shares, provided that such Common Shares have a Fair Market Value Price on the date of surrender equal to the aggregate exercise price of the Common Shares as to which such Option will be exercised and provided that accepting such Common Shares will not result in any adverse accounting consequences to the Company, as the Board of Directors determines in its sole discretion; (D) consideration received by the Company under a broker-assisted (or other) cashless exercise program (whether through a broker or otherwise) implemented by the Company in connection with the Plan; (E) by net exercise; (F) such other consideration and method of payment for the issuance of Common Shares to the extent permitted by the applicable securities laws and all applicable rules and regulations of all regulatory authorities to which the Company is subject; or (G) any combination of the foregoing methods of payment.

ARTICLE 8
INCENTIVE SHARE OPTION LIMITATIONS

8.1 To the extent required by Section 422 of the Code, if applicable, Incentive Share Options shall be subject to the following additional terms and conditions and if there is any conflict between the terms of this Article and other provisions under the Plan, the provisions under this Article shall prevail:

(a) **Dollar Limitation.** To the extent the aggregate Fair Market Value (determined as of the grant date) of Common Shares with respect to which Incentive Share Options are exercisable for the first time during any calendar year (under the Plan and all other Share option plans of the Company) exceeds U.S. $100,000, such portion in excess of U.S. $100,000 shall be treated as a Nonqualified Share Option. In the event the Participant holds two or more such Options that become exercisable for the first time in the same calendar year, such limitation shall be applied on the basis of the order in which such Options are granted.

(b) **10% Shareholders.** If a Participant owns 10% or more of the total voting power of all classes of the Company's shares, then the exercise price per share of an Incentive Share Option shall not be less than 110% of the fair market value of the Common Shares on the grant date and the Option term shall not exceed five years. The determination of 10% ownership shall be made in accordance with Section 422 of the Code.

(c) **Eligible Employees.** Eligible Persons who are not employees of the Company or one of its parent corporations or subsidiary corporations may not be granted Incentive Share Options. For purposes of this paragraph (c), "**parent corporation**" and "**subsidiary corporation**" shall have the meanings attributed to those terms for purposes of Section 424 of the Code.

(d) **Term.** The term of an Incentive Share Option shall not exceed 10 years.

(e) **Exercisability.** To qualify for Incentive Share Option tax treatment, an Option designated as an Incentive Share Option must be exercised within three months after termination of employment for reasons other than death, except that, in the case of termination of employment due to total disability, such Option must be exercised within one year after such termination. Employment shall not be deemed to continue beyond the first 90 days of a leave of absence unless the Participant reemployment rights are guaranteed by statute or contract. For purposes of this paragraph (d), "**total disability**" shall mean a mental or physical impairment of the Participant which is expected to result in death or which has lasted or is expected to last for a continuous period of 12 months or more and which causes the Participant to be unable, in the opinion of the Company and two independent physicians, to perform his or her duties for the Company and to be engaged in any substantial gainful activity. Total disability shall be deemed to have occurred on the first day after the Company and the two independent physicians have furnished their opinion of total disability to the Board of Directors.

(f) **Assignability.** No Incentive Share Option granted under the Plan may be assigned or transferred by the Participant other than by will or by the laws of descent and distribution, and during the Participant's lifetime, such Incentive Share Option may be exercised only by the Participant.

Grant. **No Incentive Share Options may be granted more than ten years after the later of (i) the adoption of the Plan by the Board and (ii) the adoption by the Board of any amendment to the Plan that constitutes the adoption of a new plan for purposes of Section 422 of the Code.**

ARTICLE 9
PROVISIONS OF SHARE AWARDS OTHER THAN OPTIONS.

The Board of Directors may in its discretion determine to grant other forms of Awards other than Options under this Plan on the terms and conditions set out below and all such other forms of share awards will be subject to the Share Reserve:

9.1 **Restricted Share Awards.**

(a) Each Restricted Share Award will be evidenced by an Award Agreement that shall contain such terms and conditions as the Board of Directors shall deem appropriate. The terms and conditions of each Award Agreement evidencing a Restricted Share Award may change from time to time, and the terms and conditions of separate Restricted Share Award need not be identical, *provided, however*, that each Award Agreement evidencing a Restricted Share Award shall conform to (through incorporation of the provisions hereof by reference in the agreement or otherwise) the substance of each of the following provisions:

(i) **Consideration.** A Restricted Share Award may be awarded in consideration for (A) cash, cheque, bank draft or money order payable to the Company; (B) past services actually rendered to the Company or an Affiliate; or (C) any other form of legal consideration that may be acceptable to the Board of Directors, in its sole discretion, and permissible under applicable law.

(ii) **Vesting; Other Restrictions.** Common Shares subject to a Restricted Share Award may be subject to forfeiture to or repurchase by the Company in accordance with a vesting schedule or other restrictions to be determined by the Board of Directors as specified in the Award Agreement evidencing the Restricted Share Award. Except as otherwise provided in this Plan, Common Shares subject to the Restricted Share Award will be released from escrow as soon as practicable after such Common Shares vest or the restrictions lapse or at such other time as the Board of Directors may determine. The Board of Directors, in its discretion, may accelerate the time at which any vesting conditions or other restrictions will lapse or be removed. On the date set forth in the Award Agreement, the Restricted Share Award for which restrictions have not lapsed will revert to the Company and again will become available for grant under the Plan.

(iii) **Voting Rights; Dividend and Other Distributions.** Before the Common Shares subject to a Restricted Share Award vest or are otherwise subject to restrictions, Participants holding Common Shares subject to the Restricted Share Award granted hereunder (A) may exercise full voting rights with respect to those Common Shares, unless the Board of Directors determines otherwise and (B) will be entitled to receive all dividends and other distributions paid with respect to such Common Shares, unless the Board of Directors provides otherwise. If any such dividends or distributions are paid in Common Shares, the Common Shares will be subject to the same restrictions on transferability and forfeitability as the Common Shares subject to the Restricted Share Award with respect to which they were paid.

9.2 **Restricted Share Unit Awards.**

(a) Each Restricted Share Unit Award will be evidenced by an Award Agreement that shall contain such terms and conditions as the Board of Directors shall deem appropriate. The terms and conditions of each Award Agreement evidencing a Restricted Share Unit Award may change from time to time, and the terms and conditions of separate Restricted Share Unit Award need not be identical, *provided, however*, that each Award Agreement evidencing a Restricted Share Unit Award shall conform to (through incorporation of the provisions hereof by reference in the agreement or otherwise) the substance of each of the following provisions:

(i) **Consideration.** At the time of grant of a Restricted Share Unit Award, the Board of Directors will determine the consideration, if any, to be paid by the Participant upon delivery of each Common Share subject to the Restricted Share Unit Award. The consideration to be paid (if any) by the Participant for each Common Share subject to a Restricted Share Unit Award may be paid in any form of legal consideration that may be acceptable to the Board of Directors in its sole discretion and permissible under applicable law.

(ii) **Vesting.** At the time of the grant of a Restricted Share Unit Award, the Board of Directors may impose such restrictions or conditions to the vesting of the Restricted Share Unit Award as it, in its sole discretion, deems appropriate. The Board of Directors, in its discretion, may accelerate the time at which any vesting conditions or other restrictions will lapse or be removed. On the date set forth in the Award Agreement, the Restricted Share Unit Award for which restrictions have not lapsed will revert to the Company and again will become available for grant under the Plan. Except as otherwise provided in the applicable Award Agreement, such portion of the Restricted Share Unit Award that has not vested will be forfeited upon the Participant's termination of services or employment or engagement with the Company.

(iii) **Payment.** Upon meeting the applicable vesting criteria, a Restricted Share Unit Award (or vested portion thereof) may be settled by the delivery of Common Shares, its cash equivalent, or in any combination thereof, as determined by the Board of Directors and contained in the Award Agreement evidencing the Restricted Share Unit Award.

(iv) **Additional Restrictions.** At the time of the grant of a Restricted Share Unit Award, the Board of Directors, as it deems appropriate, may impose such restrictions or conditions that delay the delivery of the Common Shares (or their cash equivalent) subject to a Restricted Share Unit Award to a time after the vesting of such Restricted Share Unit Award.

(v) **Dividend Equivalents.** Dividend equivalents may be credited in respect of Common Shares covered by a Restricted Share Unit Award, as determined by the Board of Directors and contained in the Award Agreement evidencing Restricted Share Units. At the sole discretion of the Board of Directors, such dividend equivalents may be converted into additional Common Shares covered by the Restricted Share Unit Award in such manner as determined by the Board of Directors. Any additional Common Shares covered by the Restricted Share Unit Award credited by reason of such dividend equivalents will be subject to all the terms and conditions of the underlying Award Agreement to which they relate.

9.3 **Share Appreciation Rights.**

(a) Each Share Appreciation Rights Award will be evidenced by an Award Agreement that shall contain such terms and conditions as the Board of Directors shall deem appropriate. The terms and conditions of each Award Agreement evidencing a Share Appreciation Rights Award may change from time to time, and the terms and conditions of separate Share Appreciation Right Award need not be identical, *provided, however*, that each Award Agreement evidencing a Share Appreciation Rights Award shall conform to (through incorporation of the provisions hereof by reference in the agreement or otherwise) the substance of each of the following provisions:

(i) **Term.** No Share Appreciation Right shall be exercisable after the expiration of ten (10) years from the date of its grant or such shorter period specified in the Share Appreciation Right Agreement.

(ii) **Exercise Price.** The exercise under each Share Appreciation Right will be determined by the Board of Directors by reference to the fair market price(s) of the Common Shares on the primary Stock Exchange for which most trading of the Common Shares occurs, generally by reference to the closing market price of the Common Shares, provided that such price may not be less than one hundred percent (100%) of the Fair Market Value Price per Common Share on the date of grant.

(iii) **Calculation of Appreciation.** The appreciation distribution payable on the exercise of a Share Appreciation Right will be not greater than an amount equal to the excess of (A) the aggregate Fair Market Value Price (on the date of the exercise of the Share Appreciation Right) of a number of Common Shares equal to the number of Common Share equivalents in which the Participant is vested under such Share Appreciation Right, and with respect to which the Participant is exercising the Share Appreciation Right on such date, over (B) the aggregate Exercise Price of such number of Common Share equivalents being exercised.

(iv) **Vesting.** At the time of the grant of a Share Appreciation Right, the Board of Directors may impose such restrictions or conditions to the vesting of such Share Appreciation Right as it, in its sole discretion, deems appropriate.

(v) **Exercise.** To exercise any outstanding Share Appreciation Right, the Participant must provide written notice of exercise to the Company in compliance with the provisions of the Award Agreement evidencing such Share Appreciation Right.

(vi) **Payment.** The appreciation distribution in respect of a Share Appreciation Right may be paid in Common Shares, in cash, in any combination of the two or in any other form of consideration, as determined by the Board of Directors and set forth in the Award Agreement evidencing such Share Appreciation Right.

(vii) **Expiry of Share Appreciation Rights.** Each Share Appreciation Right will expire upon the date determined by the Board of Directors, in its sole discretion, and set forth in the Award Agreement evidencing Share Appreciation Rights. Notwithstanding the foregoing, the rules of paragraph 7.1(e) also will apply to Share Appreciation Rights.

9.4 **Performance Share Awards.**

(a) Each Performance Share Award will be evidenced by an Award Agreement that shall contain such terms and conditions as the Board of Directors shall deem appropriate. The terms and conditions of each Award Agreement evidencing a Performance Share Award may change from time to time, and the terms and conditions of separate Performance Share Award need not be identical, *provided*, *however*, that each Award Agreement evidencing a Performance Share Award shall conform to (through incorporation of the provisions hereof by reference in the agreement or otherwise) the substance of each of the following provisions:

(i) **Performance Objectives and Other Terms.** The Board of Directors will set performance objectives or other vesting provisions (including, without limitation, continued status as an Eligible Person) in its discretion which, depending on the extent to which they are met, will determine the number or value of Common Shares subject to a Performance Share Award that will be paid out to the Participant. The time period during which the performance objectives or other vesting provisions must be met will be called the “Performance Period.” Each Performance Share Award will be evidenced by an Award Agreement that will specify the Performance Period, and such other terms and conditions as the Board of Directors, in its sole discretion, will determine. The Board of Directors may set performance objectives based upon the achievement of Company-wide, divisional, business unit or individual goals (including, but not limited to, continued employment or service), applicable federal, provincial or state securities laws, or any other basis determined by the Board of Directors in its discretion.

(ii) **Vesting.** After the applicable Performance Period has ended, the holder of Performance Share Award will be entitled to receive a payout of the number of Common Shares subject to the Performance Share Award earned by the Participant over the Performance Period, to be determined as a function of the extent to which the corresponding performance objectives or other vesting provisions have been achieved. After the grant of a Performance Share Award, the Board of Directors, in its sole discretion, may reduce or waive any performance objectives or other vesting provisions for such Common Shares subject to the Performance Share Award.

(iii) **Payment.** Upon meeting the applicable vesting criteria, a Performance Share Award (or vested portion thereof) may be settled by the delivery of Common Shares, its cash equivalent, or in any combination thereof, as determined by the Board of Directors and contained in the Award Agreement evidencing the Performance Share Award.

(iv) **Expiry of Performance Share Award.** On the date set forth in the Award Agreement, all unearned or unvested Common Shares subject to a Performance Share Award will be forfeited to the Company, and again will be available for grant under the Plan.

ARTICLE 10
PROVISIONS APPLICABLE TO AWARDS

10.1 **Leave of Absence/Transfer Between Locations.** Unless the Board of Directors provides otherwise and subject to applicable laws, vesting of Awards granted hereunder will be suspended during any unpaid leave of absence. A Participant will not cease to be an employee in the case of (a) any leave of absence approved by the Company, (b) transfers between locations of the Company or between the Company, its parent, or any subsidiary, or (c) any statutory-protected leave. For purposes of Incentive Share Options, no such leave may exceed 3 months, unless reemployment upon expiration of such leave is guaranteed by statute or contract. If reemployment upon expiration of a leave of absence approved by the Company is not so guaranteed, then 6 months following the 1st day of such leave any Incentive Share Option held by the Participant will cease to be treated as an Incentive Share Option and will be treated for U.S. tax purposes as a Nonqualified Share Option.

10.2 **Restrictions on Transfer.** Unless the Board of Directors provides otherwise, an Award may not be sold, pledged, assigned, hypothecated, transferred, or disposed of in any manner other than by will or by the laws of descent or distribution and may be exercised, during the lifetime of the Participant, only by the Participant. If the Board of Directors makes an Award transferable, such Award will contain such additional terms and conditions as the Board of Directors deems appropriate.

10.3 **Adjustments; Dissolution or Liquidation; Merger or Change of Control.**

(a) **Adjustments.** In the event that any dividend or other distribution (whether in the form of cash, Common Shares, other securities, or other property), recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, repurchase, or exchange of Common Shares or other securities of the Company, or other change in the corporate structure of the Company affecting the Common Shares occurs, the Board of Directors, in order to prevent diminution or enlargement of the benefits or potential benefits intended to be made available under the Plan, will adjust the number and class of Common Shares that may be delivered under the Plan and/or the number, class, and price of Common Shares covered by each outstanding Award, and the Share Reserve.

(b) **Dissolution or Liquidation.** In the event of the proposed dissolution or liquidation of the Company, the Board of Directors will notify each Participant as soon as practicable prior to the effective date of such proposed transaction. To the extent it has not been previously exercised, an Award will terminate immediately prior to the consummation of such proposed action.

(c) **Change of Control.** Subject to the immediately following paragraph, in the event of a merger of the Company with or into another corporation or other entity or a Change of Control, each outstanding Award will be treated as the Board of Directors determines, including, without limitation, that (i) Awards may be assumed, or substantially equivalent Awards will be substituted, by the acquiring or succeeding corporation (or an affiliate thereof) with appropriate adjustments as to the number and kind of shares and prices; (ii) upon written notice to a Participant, that the Participant’s Awards will terminate upon or immediately prior to the consummation of such merger or Change of Control; (iii) outstanding Awards will vest and become exercisable, realizable, or payable, or restrictions applicable to an Award will lapse, in whole or in part prior to or upon consummation of such merger or Change of Control, and, to the extent the Board of Directors determines, terminate upon or immediately prior to the effectiveness of such merger or Change of Control; (iv) (A) the termination of an Award in exchange for an amount of cash and/or property, if any, equal to the amount that would have been attained upon the exercise of such Award or realization of the Participant’s rights as of the date of the occurrence of the transaction (and, for the avoidance of doubt, if as of the date of the occurrence of the transaction the Board of Directors determines in good faith that no amount would have been attained upon the exercise of such Award or realization of the Participant’s rights, then such Award may be terminated by the Company without payment), or (B) the replacement of such Award with other rights or property selected by the Board of Directors in its sole discretion; or (v) any combination of the foregoing. In taking any of the actions permitted under this subparagraph (c), the Board of Directors will not be required to treat all Awards similarly in the transaction.

In the event that the successor corporation does not assume or substitute for the Award consistent with subsection (i) of the immediately preceding paragraph, the Participant will fully vest in and have the right to exercise all of his or her outstanding Options and Share Appreciation Rights, including Common Shares as to which such Awards would not otherwise be vested or exercisable, all restrictions on Restricted Share Awards and Restricted Share Unit Awards will lapse, and, with respect to Awards with performance-based vesting, all performance goals or other vesting criteria will be deemed achieved at one hundred percent (100%) of target levels and all other terms and conditions met. In addition, if an Option or Share Appreciation Right is not assumed or substituted in the event of a Change of Control, the Board of Directors will notify the Participant in writing or electronically that the Option or Share Appreciation Right will be exercisable for a period of time determined by the Board of Directors in its sole discretion, and the Option or Share Appreciation Right will terminate upon the expiration of such period.

For the purposes of this subparagraph (c), an Award will be considered assumed if, following the Change of Control, the Award confers the right to purchase or receive, for each Common Share subject to the Award immediately prior to the Change of Control, the consideration (whether stock, cash, or other securities or property) received in the Change of Control by holders of Common Shares for each Common Share held on the effective date of the transaction (and if holders were offered a choice of consideration, the type of consideration chosen by the holders of a majority of the outstanding Common Shares); provided, however, that if such consideration received in the Change of Control is not solely common shares or common stock of the successor corporation or its Parent, the Board of Directors may, with the consent of the successor corporation, provide for the consideration to be received upon the exercise of an Option or Share Appreciation Rights or upon the payout of a Restricted Share Unit, Performance Share Award, for each Common Share subject to such Award, to be solely common shares or common stock of the successor corporation or its parent equal in fair market value to the per share consideration received by holders of Common Shares in the Change of Control.

Notwithstanding anything in this subparagraph (c) to the contrary, an Award that vests, is earned or paid-out upon the satisfaction of one or more performance goals will not be considered assumed if the Company or its successor modifies any of such performance goals without the Participant's consent; provided, however, a modification to such performance goals only to reflect the successor corporation's post-Change of Control corporate structure will not be deemed to invalidate an otherwise valid Award assumption.

(d) **Outside Director Awards.** With respect to Awards granted to an Outside Director that are assumed or substituted for, if on the date of or following such assumption or substitution the Participant's status as a director of the Company or a director of the successor corporation, as applicable, is terminated other than upon a voluntary resignation by the Participant (which does not include resignation at the request of the acquirer), then the Participant will fully vest in and have the right to exercise Options and/or Share Appreciation Rights as to all of the Common Shares underlying such Award, including those Common Shares which would not otherwise be vested or exercisable, all restrictions on Restricted Share Awards and Restricted Share Unit Awards will lapse, and, with respect to Awards with performance-based vesting, all performance goals or other vesting criteria will be deemed achieved at one hundred percent (100%) of target levels and all other terms and conditions met.

10.4 **Outside Director Limitations**

(a) **Cash-Settled Awards.** No Outside Director may be granted, in any fiscal year of the Company, cash-settled Awards with a grant date fair value (determined in accordance with U.S. generally accepted accounting principles) of more than US$500,000, increased to US$1,000,000 in connection with his or her initial service.

(b) **Share-Settled Awards.** No Outside Director may be granted, in any fiscal year of the Company, share-settled Awards with a grant date fair value (determined in accordance with U.S. generally accepted accounting principles) of more than US$500,000, increased to US$1,000,000 in connection with his or her initial service.

10.5 **Representations and Covenants of Award holder.** Each Award Agreement will contain representations and covenants of the holder that:

(a) the holder is a director, officer, employee or Consultant of the Company or of a subsidiary of the Company or a person otherwise approved as an "**Eligible Person**" under this Plan by the Board of Directors on the date of grant;

(b) the holder's participation in the Plan is voluntary and the holder has not been induced to enter into such Award Agreement by the expectation of employment or engagement as a Consultant or continued employment or engagement as a Consultant with the Company or any Affiliate;

(c) the holder is aware that the grant of the Award and the issuance by the Common Shares thereunder are exempt from the obligation under applicable securities laws to file a prospectus or other registration document (other than a registration statement on Form S-8 with the United States Securities and Exchange Commission) qualifying the distribution of the Awards or the Common Shares to be distributed thereunder under any applicable securities laws and if such exemption for any reason becomes unavailable, the obligation of the Company to grant any Awards or issue any Common Shares upon the exercise, vesting, or settlement of an Award, as the case may be, will cease; and

(d) the holder or the Legal Representative, as the case may be, will prior to and upon any sale or disposition of any Common Shares purchased pursuant to the exercise of the Share Awards, comply with all applicable securities laws and all applicable rules and regulations of all regulatory authorities to which the Company is subject, including the Stock Exchanges, and will not offer, sell or deliver any of such Common Shares, directly or indirectly, in the United States or to any citizen or resident of, or any company, partnership or other entity created or organized in or under the laws of, the United States, or any estate or trust the income of which is subject to United States federal income taxation regardless of its source, except in compliance with the securities laws of the United States.

10.6 **Clawback/Recovery.** All Awards granted under the Plan will be subject to recoupment in accordance with any clawback policy that the Company is required to adopt pursuant to the listing standards of any Stock Exchange on which the Company's securities are listed or as is otherwise required by the Dodd-Frank Wall Street Reform and Consumer Protection Act or other applicable law. In addition, the Board of Directors may impose such other clawback, recovery or recoupment provisions in an agreement evidencing the grant of the Awards as the Board of Directors determines necessary or appropriate, including but not limited to a reacquisition right in respect of previously acquired Common Shares. No recovery of compensation under such a clawback policy will be an event giving rise to a right to resign for "good reason" or "constructive termination" (or similar term) under any agreement with the Company or any Affiliate.

10.7 **Taxes**

(a) **Withholding Requirements.** Prior to the delivery of any Common Shares or cash pursuant to an Award (or exercise thereof) or such earlier time as any tax withholding obligations are due, the Company will have the power and the right to deduct or withhold, or require a Participant to remit to the Company, an amount sufficient to satisfy U.S. or Canadian federal, provincial, state, local, foreign or other taxes required to be withheld with respect to such Award (or exercise thereof).

(b) **Withholding Arrangements.** The Board of Directors, in its sole discretion and pursuant to such procedures as it may specify from time to time, may permit a Participant to satisfy such tax withholding obligation, in whole or in part by (without limitation) (i) paying cash, (ii) electing to have the Company withhold otherwise deliverable cash or Common Shares having a Fair Market Value Price equal to the minimum statutory amount required to be withheld, or (c) delivering to the Company already-owned Common Shares having a Fair Market Value Price equal to the minimum statutory amount required to be withheld. The Fair Market Value Price of the Common Shares to be withheld or delivered will be determined as of the date that the taxes are required to be withheld.

(c) **Compliance With Code Section 409A.** Awards will be designed and operated in such a manner that they are either exempt from the application of, or comply with, the requirements of Code Section 409A such that the grant, payment, settlement or deferral will not be subject to the additional tax or interest applicable under Code Section 409A, except as otherwise determined in the sole discretion of the Board of Directors. The Plan and each Award Agreement under the Plan is intended to meet the requirements of Code Section 409A and will be construed and interpreted in accordance with such intent, except as otherwise determined in the sole discretion of the Board of Directors. To the extent that an Award or payment, or the settlement or deferral thereof, is subject to Code Section 409A the Award will be granted, paid, settled or deferred in a manner that will meet the requirements of Code Section 409A, such that the grant, payment, settlement or deferral will not be subject to the additional tax or interest applicable under Code Section 409A.

ARTICLE 11
SUSPENSION, AMENDMENT OR TERMINATION OF PLAN

11.1 The Plan will become effective upon the later to occur of (i) its adoption by the Board of Directors or (ii) the business day immediately prior to the Registration Date (the "Effective Date"). It will continue in effect for a term of ten (10) years from the date adopted by the Board of Directors, unless terminated earlier under paragraph 11.2 of the Plan.

11.2 The Board of Directors will have the right at any time and from time to time to suspend, amend or terminate this Plan in any manner without consent or approval from Participants or shareholders (provided that no such suspension, amendment or termination may be made that will materially prejudice the rights of any Participant under any Award previously granted to such Participant without consent by such Participant).

11.3 The full powers of the Board of Directors as provided for in this Plan will survive the termination of this Plan until all Awards have been exercised or settled in full or have otherwise expired.

ARTICLE 12
APPLICABLE LAW

12.1 The laws of the Province of British Columbia shall apply to the Plan and any Award Agreement evidencing the grant of Awards granted hereunder and will be interpreted and construed in accordance with the laws of the Province of British Columbia.

12.2 Subject to any written agreement between the parties, the parties will submit all their disputes arising out of or in connection with the Plan to the exclusive jurisdiction of the courts of the Province of British Columbia.

ARTICLE 13

13.1 The Plan will be subject to shareholder approval within 12 months after the date the Plan is adopted by the Board. Such shareholder approval will be obtained in the manner and to the degree required under applicable laws.

SHARE OPTION AGREEMENT

THIS AGREEMENT made on [   ]

AMONG:

Xenon Pharmaceuticals Inc., a company incorporated under the laws of Canada
(the "Company")

AND:

«First Name» «Last Name» of «Address», «City», «StateProv» «Country» «ZipPostal»

(the "Optionee")

WHEREAS:

A. The Optionee is a director, officer, employee or Consultant of the Company or of a subsidiary of the Company or a person otherwise approved by the Board of Directors as "Eligible Persons"; and

B. The Company considers that the grant to the Optionee of an option to purchase Common Shares in the capital of the Company will promote the interests of the Company by furnishing the Optionee with greater incentive to further develop and promote the business and financial success of the Company and by furthering the identity of interest of the Optionee with the shareholders of the Company generally through share ownership in the Company;

NOW THEREFORE THIS AGREEMENT WITNESSES THAT in consideration of the mutual premises and respective covenants and agreements herein contained, the parties hereto covenant and agree as follows:

ARTICLE I
INTERPRETATION

1.1 Definitions

In this Agreement unless there is something in the subject matter or context inconsistent therewith, words and terms used herein will have the meanings set forth. To the extent a capitalized term is used herein and not otherwise defined, it shall have the meaning prescribed under the Plan:

(1) "Affiliate" has the meaning ascribed thereto under the *Canada Business Corporations Act* in effect on the date hereof;

(2) “Board of Directors” means the board of directors of the Company for the time being;

(3) “Business Day” means a day other than Saturday, Sunday and any other day which is a legal holiday in British Columbia;

(4) “Common Shares” means common shares without par value in the capital of the Company;

(5) “Expiry Date” means the close of business on — or such later date as may be extended pursuant to the terms of the Plan;

(6) “Option” means the option to purchase Common Shares granted by this Agreement;

(7) “Option Exercise Form” has the meaning under Section 2.4 of this Agreement;

(8) “Plan” means the 2014 Equity Incentive Plan of the Company adopted by the Board of Directors on April   , 2014, as the same may from time to time be supplemented or amended and in effect;

(9) “Retirement” means retirement as an employee and/or officer of the Company, and if there is any question on whether a cessation of employment is by way of a retirement or not, the determination by the Chief Executive Officer (or in his absence or in the case of a situation involving the cessation of employment of an executive officer of the Company, the Compensation Committee of the Board of Directors or the independent members of the Board of Directors) shall be conclusive and binding on the Optionee;

(10) “Separate Agreement” has the meaning under Section 2.2 of this Agreement;

(11) “subsidiary” has the meaning ascribed thereto under the *Securities Act* (British Columbia) as the same may from time to time be amended or re-enacted.

1.2 Interpretation

For the purposes of this Agreement, except as otherwise provided:

(1) “this Agreement” means this Share Option Agreement as it may from time to time be supplemented or amended and in effect, and which is deemed to be an Award Agreement in accordance with the Plan;

(2) all references in this Agreement to “Articles”, “Sections” and other subdivisions are to the designated Articles, Sections and other subdivisions of this Agreement;

(3) the words “herein”, “hereof”, “hereunder” and other words of similar import refer to this Agreement as a whole and not to any particular Article, Section or other subdivision;

(4) the headings are for convenience only and do not form a part of this Agreement and are not intended to interpret, define or limit the scope, extent or intent of this Agreement or any provision hereof;

(5) the singular of any term includes the plural, and vice versa, the use of any term is equally applicable to any gender and, where applicable, a body corporate, the word “or” is not exclusive and the word “including” is not limiting whether or not non-limiting language (such as “without limitation” or “but not limited to” or words of similar import) is used with reference thereto;

(6) where the time for doing an act falls or expires on a day other than a Business Day, the time for doing such act is extended to the next day which is a Business Day;

(7) any reference to a statute is a reference to the applicable statute and to any regulations made pursuant thereto and includes all amendments made thereto and in force from time to time and any statute or regulation that has the effect of supplementing or superseding such statute or regulation; and

(8) any other capitalized terms not defined herein but defined in the Plan shall have the meaning as set out in the Plan.

ARTICLE II
THE OPTION

2.1 Grant

Subject to the provisions of this Agreement and all the terms of the Plan, the Company hereby grants to the Optionee an option to purchase **«Options»** Common Shares at an exercise price of $ — per share. [**NTD:** Add the following language if designated as such by the board in its resolutions: This Option is intended to be an Incentive Share Option for U.S. tax purposes.]

2.2 Expiry of Option

Subject to the terms of the Plan (including but not limited to section 7.1(e)(v) of the Plan), the provisions of this Agreement below, and/or any employment or service agreement, offer letter, change in control severance agreement, or any other agreement that, prior to the date of this Agreement, has been entered into between the Optionee and the Company or any Affiliate (such agreement, a "Separate Agreement"), the Option will expire upon the earliest to occur of the following:

1. the Expiry Date;
2. the date which is 90 days after the Optionee ceases to be an "Eligible Person" due to termination of employment by the Company without Cause or due to voluntary termination of employment by the Optionee (other than Retirement);
3. the date which is 180 days from the date Optionee ceases to be an "Eligible Person" due to Retirement; and
4. the date on which the Optionee ceases to be an "Eligible Person" due to termination of employment by the Company for Cause or material breach of the Eligible Person's duty to the Company;
5. the date which is 365 days from the date Optionee ceases to be an "Eligible Person" due to disability; and
6. the date which is 365 days from the date Optionee ceases to be an "Eligible Person" due to death;

however, in the event of the death of the Optionee occurring during the time period specified in subsections 2.2(2) and 2.2(4) above, subject to earlier expiry on the Expiry Date, the Option will expire on the date which is 365 days after the date the Optionee ceased to be an "Eligible Person".

For greater certainty for the purpose of this Agreement and the Plan, the date on which the employment of an Optionee is terminated without Cause or pursuant to voluntary resignation shall be deemed to be the last day the Optionee actively works in the Company's business (or in the case of an alleged constructive dismissal, the date on which the alleged constructive dismissal is alleged to have occurred), and not during or as of the end of any period following such date during which the Optionee is in receipt of, or entitled to receive, statutory, contractual or common law notice of termination or any compensation in lieu of such notice.

2.3 Nontransferability of Option

The Option is not transferable or assignable and is exercisable only by the Optionee or, in the event of the death of the Optionee or the appointment of a committee or duly appointed attorney of the Optionee or of the estate of the Optionee on the grounds that the Optionee is incapable, by reason of physical or mental infirmity, of managing his affairs, the Optionee's legal representative or such committee or attorney, as the case may be (the "Legal Representative").

2.4 Manner of Exercise

Subject to the terms of the Plan, the Option may be exercised by (i) delivering to the Company, prior to the expiry of the Option, an option exercise form duly executed by the Optionee or its Legal Representative (the "Option Exercise Form") substantially in the form of Schedule "A" completed and executed in a manner acceptable to the Company, acting reasonably, or (ii) in a manner and pursuant to such procedures as the Board of Directors may determine, which will state the election to exercise the Option (with appropriate proof of completion of such exercise procedure) (the “Alternative Exercise Procedure”). The Option Exercise Form or the completion of the Alternative Exercise Procedure (as applicable) must be accompanied by payment in full for the number of Common Shares in respect of which the Option is being exercised in lawful currency of the United States of America, in cash, bank draft, certified cheque or other form of payment acceptable to the Company, made payable to the Company at its principal place of business at the time of the exercise of the Option.

Payment of the aggregate exercise price will be by any of the following, or a combination thereof, at the election of the Optionee: (a) cash; (b) cheque; (c) consideration received by the Company under a formal cashless exercise program adopted by the Company in connection with the Plan; or (d) surrender of other Common Shares which have a Fair Market Value Price on the date of surrender equal to the aggregate exercise price of the exercised Common Shares, provided that accepting such Common Shares, in the sole discretion of the Board of Directors, will not result in any adverse accounting consequences to the Company.

At the time the Optionee exercises the Option, in whole or in part, and at any time thereafter as requested by the Company, the Optionee hereby authorizes withholding from payroll and any other amounts payable to the Optionee by the Company, and otherwise agree to make adequate provision for any sums required to satisfy the U.S. and Canadian federal, provincial, state, local and foreign tax withholding obligations of the Company or an Affiliate, if any, which arise in connection with the exercise of the Option.

The Optionee may not exercise the Option unless the tax withholding obligations of the Company and/or any Affiliate are satisfied. Accordingly, the Optionee may not be able to exercise the Option when desired even though the Option is vested, and the Company will have no obligation to issue a certificate for such Common Shares, unless such obligations are satisfied.

2.5 Issuance of Shares

The Company will have no obligation to issue Common Shares upon the exercise of the Option unless the Board of Directors is satisfied that the issuance of such Common Shares to the Optionee will be exempt from all registration or qualification requirements of applicable securities laws and will be permitted under the applicable rules and regulations of all regulatory authorities to which the Company is subject, including any stock exchange or other organized market on which the Common Shares may from time to time be listed or posted for trading. In particular, if required by any regulatory authority to which the Company is subject, including any stock exchange or other organized market on which the Common Shares may from time to time be listed or traded, shareholder approval to the grant of this Option must be obtained prior to the exercise of the Option or to the amendment of this Agreement.

2.6 Compliance with Laws

The Board of Directors may from time to time take such steps and require such documentation from the Optionee which in its opinion is necessary or desirable to ensure compliance with all applicable laws. The Board of Directors may also from time to time take such steps which in its opinion are necessary or desirable to restrict the transferability of any Common Shares acquired on the exercise of any Option in order to ensure such compliance, including the endorsement of a legend on any certificate representing Common Shares acquired on the exercise of the Option to the effect that such Common Shares may not be offered, sold or delivered except in compliance with the applicable securities laws and regulations of Canada or the United States.

2.7 Delivery of Share Certificates

Subject to Sections 2.5 and 2.6, the Company will as soon as practicable after receipt of the Option Exercise Form or the confirmation of the completion of the Alternative Exercise Procedure and the payment referred to in Section 2.4 issue and deliver a certificate or certificates representing the Common Shares so purchased.

2.8 Vesting

Unless otherwise specified by the Board in the terms of grant and subject to the terms of the Plan and any Separate Agreement (if applicable), the Common Shares subject to the Options granted under this Agreement will vest and be available to the Optionee to purchase (prior to expiry of the Options as provided for in Section 2.2 above) as follows:

(1) $^1/_4$ (one quarter) on first anniversary of the grant of the Option; and

(2) 1/48 (one forty-eighth) on a monthly basis over the three (3) years following the first anniversary of the grant of the Option, in equal amounts, on the last day of each month;

provided that:

(3) if the Optionee ceases to be an “Eligible Person” due to termination of employment by the Company without Cause or alleged constructive dismissal or due to voluntary termination by the Optionee (other than Retirement), all Common Shares subject to Options granted under this Agreement which are not yet available for purchase as provided for above (the “Unvested Options”) will immediately be cancelled on the effective date of such termination, which shall be deemed to be the last day the Optionee actively works in the Company’s business (or in the case of an alleged constructive dismissal, the date on which the alleged constructive dismissal is alleged to have occurred), and no statutory, contractual or common law notice entitlement or any entitlement to compensation in lieu of such notice shall operate to extend the vesting of Options past said deemed termination date;

(4) if the Optionee ceases to be an “Eligible Person” due to voluntary termination of employment by the Optionee (other than Retirement), all Unvested Options will immediately be cancelled on the effective date of such termination;

(5) if the Optionee ceases to be an “Eligible Person” due to termination by the Company of the Optionee’s employment for Cause, all Unvested Options will immediately be cancelled on the date when the Company notifies the Optionee of such termination;

(6) if the Optionee ceases to be an “Eligible Person” due to Retirement, all Unvested Options will immediately be cancelled on the date of Retirement unless the Board of Directors has expressly granted continued vesting after Retirement in accordance with the schedule provided for in Subsections 2.8(1), (2) and (3) or such other schedule at the Board of Directors’ discretion;

(7) if the Optionee ceases to be an “Eligible Person” due to disability or before the expiry of the period for exercise as provided for in Subsections 2.2(2) and 2.2(4) above, all Unvested Options will be immediately be cancelled on the date the Optionee ceases to be an Eligible Person; and

(8) if the Optionee dies before ceasing to be an “Eligible Person” or before the expiry of the period for exercise as provided for in Subsections 2.2(2) and 2.2(4) above, all Unvested Options will be immediately cancelled on the date of death**.**

Notwithstanding the above, the vesting of the Common Shares subject to the Options shall be subject to any vesting acceleration provisions applicable to this Option contained in the Plan and/or any Separate Agreement.

Further, and notwithstanding the above, the Board of Directors may at its discretion accelerate the period of time in which any Unvested Options may become exercisable, provided that the Board of Directors determines that such acceleration is appropriate and in the best interest of the Company in the circumstances and it is agreed and acknowledged that there is no obligation on the Board of Directors to exercise such discretion nor shall the Board of Directors be required to provide reasons for exercise or non-exercise of such discretion.

ARTICLE III
ADJUSTMENTS

3.1 Adjustments

This Agreement will be amended by the Company unilaterally (without the need of consent or notice to the Optionee) upon the occurrence of the events referred to in Section 10.3(a) of the Plan so that the rights of the Optionee hereunder, including the number of Common Shares that may be purchased on the exercise of the Option and the Exercise Price at which such Common Shares may be purchased, will be adjusted in accordance with the provisions set forth in the Plan. Successive adjustments will be made in the case of the occurrence of more than one such event as provided for therein, but, in the case of each such event, only from and after the occurrence of such event. Until the occurrence of such event, the rights of the Optionee hereunder, including the number of Common Shares that may be purchased on the exercise of the Option and the Exercise Price at which such Common Shares may be purchased, will remain unamended as set out herein.

ARTICLE IV
COVENANTS AND REPRESENTATIONS

4.1 Representations and Covenants of the Company

(1) The Company hereby covenants that it will reserve or cause to be reserved for allotment sufficient Common Shares for issue to the Optionee of all Common Shares which are issuable from time to time under the Option.

(2) The Company represents that the Optionee is a bona fide employee of the Company or of a subsidiary of the Company or an individual employed by a person which is providing management services to the Company (other than investor relations) or a person who is approved as an "Eligible Person" by the Board of Directors.

4.2 Representations and Covenants of the Optionee

The Optionee hereby represents and covenants that:

(1) the Optionee is a director, officer, employee or Consultant of the Company or of a subsidiary of the Company or a person who is approved as an "Eligible Person" by the Board of Directors on the date of grant;

(2) the Optionee's participation in the Plan is voluntary and the Optionee has not been induced to enter into this Agreement by the expectation of employment or continued employment with the Company or any person providing management services to the Company or any Affiliate;

(3) the Optionee is aware that the grant of the Option and the issuance by the Company of Common Shares thereunder are exempt from the obligation under applicable securities laws to file a prospectus or other registration document (other than a registration statement on Form S-8 with the United States Securities and Exchange Commission) qualifying the distribution of the Options or the Common Shares to be distributed thereunder under any applicable securities laws and if such exemption for any reason becomes unavailable, the obligation of the Company to grant any Options or issue any Common Shares upon the exercise of an Option will cease;

(4) if the Optionee ceases to be an "Eligible Person" due to termination of employment by the Company without cause or alleged constructive dismissal or due to voluntary termination by the Optionee (other than Retirement), the Optionee will not make any claims for continued vesting of Unvested Options past the effective date of such termination, which shall be deemed to be the last day the Optionee actively works in the Company's business (or in the case of an alleged constructive dismissal, the date on which the alleged constructive

dismissal is alleged to have occurred), and will not make any claims for compensation in lieu of statutory, contractual or common law notice or damages relating thereto;

(5) if the Optionee or the Legal Representative of the Optionee exercises the Option, the Optionee or the Legal Representative, as the case may be, will prior to and upon any sale or disposition of any Common Shares purchased upon the exercise of the Option, comply with all applicable securities laws and all applicable rules and regulations of all regulatory authorities to which the Company is subject, including any stock exchange or other organized market on which the Common Shares may be listed or posted for trading, and will not offer, sell or deliver any of such Common Shares, directly or indirectly, in the United States or to any citizen or resident of, or any company, partnership or other entity created or organized in or under the laws of, the United States, or any estate or trust the income of which is subject to United States federal income taxation regardless of its source, except in compliance with the securities laws of the United States; and

(6) the Optionee agrees that the Company does not have a duty to design or administer the Plan or its other compensation programs in a manner that minimizes the Optionee's tax liabilities and the Optionee will not make any claim against the Company, or any of its officers, directors, employees or Affiliates related to tax liabilities arising from the Options or any of the Optionee's other compensation.

ARTICLE V
MISCELLANEOUS

5.1 Special Provisions for Incentive Share Options

(1) For U.S. taxpayers, if the Option is designated in this Agreement as an Incentive Share Option, this Option is intended to qualify as an Incentive Share Option under Section 422 of the Internal Revenue Code of 1986, as amended (the "Code"). However, if this Option is intended to be an Incentive Share Option, to the extent that it exceeds the $100,000 rule of Code Section 422(d) it will be treated as a Nonqualified Share Option. Further, if for any reason this Option (or portion thereof) will not qualify as an Incentive Share Option, then, to the extent of such nonqualification, such Option (or portion thereof) shall be regarded as a Nonqualified Share Option granted under the Plan. In no event will the Board of Directors, the Company or any parent or subsidiary or any of their respective employees or directors have any liability to the Optionee (or any other person) due to the failure of the Option to qualify for any reason as an Incentive Share Option.

(2) Further, if the Option granted to the Optionee herein is an Incentive Share Option, and if the Optionee sells or otherwise disposes of any of the Common Shares acquired pursuant to the Incentive Share Option on or before the later of (i) the

date two (2) years after the grant date, or (ii) the date one (1) year after the date of exercise, the Optionee will immediately notify the Company in writing of such disposition. The Optionee agrees that the Optionee may be subject to U.S. and Canadian federal, provincial, state, local and foreign income tax withholding by the Company on the compensation income recognized by the Optionee.

5.2 Section 409A

Under Code Section 409A, an option that vests after December 31, 2004 (or that vested on or prior to such date but which was materially modified after October 3, 2004) that was granted with a per share exercise price that is determined by the U.S. Internal Revenue Service (the "IRS") to be less than the fair market value of a share on the date of grant (a "Discount Option") may be considered "deferred compensation." A Discount Option may result in (i) income recognition by the Optionee prior to the exercise of the option, (ii) an additional twenty percent (20%) federal income tax, and (iii) potential penalty and interest charges. The Discount Option may also result in additional state income, penalty and interest charges to the Optionee. The Optionee acknowledges that the Company cannot and has not guaranteed that the IRS will agree that the Exercise Price of this Option equals or exceeds the Fair Market Value of a Share on the grant date in a later examination. The Optionee agrees that if the IRS determines that the Option was granted with a per Share Exercise Price that was less than the Fair Market Value of a Share on the grant date, the Optionee will be solely responsible for the Optionee's costs related to such a determination.

5.3 Notices

Any notice or other communication required or permitted to be delivered under this Agreement will be considered delivered only if in writing and when it is actually delivered (which delivery may be by telex, telecopy or other telecommunications device) to the attention of the party to whom it is intended at the principal business address of the Company, if addressed to the Company, or to the address specified above, if to the Optionee, or to such other address as such party may designate to the other party by notice in writing delivered in accordance with this Section.

5.4 Interpretation

Any question arising as to the interpretation of this Agreement will be determined by the Board of Directors and, absent manifest error, such determination will be conclusive and binding on the Company and the Optionee.

5.5 Further Assurances

Each of the parties hereto will, on demand by the other party hereto, execute and deliver all such further documents and instruments and do all such further acts and things as the party may either before or after the execution and delivery of this Agreement reasonably request to evidence, carry out and give full effect to the terms, conditions, intent and meaning of this Agreement.

5.6 Severability

If any provision of this Agreement is determined to be void, illegal or unenforceable, such provision will be construed to be separate and severable from this Agreement and will not impair the validity, legality or enforceability of any other provision of this Agreement and the remainder of this Agreement will continue to be binding on the parties hereto as if such provision had been deleted.

5.7 No Assignment

Neither this Agreement nor the Option may be assigned, transferred or charged in whole or in part by the Optionee, and any purported assignment, transfer or charge shall cause this Agreement and the Option to lapse forthwith and be null and void after that time.

5.8 Amendment

No amendment shall be made to this Agreement unless all applicable rules and regulations of all regulatory authorities to which the Company is subject have been complied with.

5.9 Burden and Benefit

This Agreement will be binding upon and will enure to the benefit of the Company and its successors and assigns and the Optionee and, if applicable, his Legal Representative.

5.10 Time

Time will be of the essence in this Agreement.

5.11 Governing Law and Jurisdiction

This Agreement and all matters arising hereunder will be governed by and construed in accordance with the laws of the Province of British Columbia. Subject to any written agreement between the parties, the parties will submit all their disputes arising out of or in connection with this Agreement to the exclusive jurisdiction of the courts of British Columbia.

5.12 Electronic Delivery and Acceptance

The Company may, in its sole discretion, decide to deliver any documents related to Options awarded under the Plan or future options that may be awarded under the Plan by electronic means or request the Optionee’s consent to participate in the Plan by electronic means, including, without limitation, by posting them on a website maintained by the Company or a third party under contract with the Company or through such methods indicated in this Agreement. The Optionee hereby consents to receive such documents by electronic delivery and agrees to participate in the Plan through any on-line or electronic system established and maintained by the Company or a third party designated by the Company.

If the Company posts such documents on a website, it shall notify Participant by e-mail or such other reasonable manner as then determined by the Company.

5.13 Incorporation of the terms of the Plan

This Agreement shall be deemed to have incorporated all the terms of the Plan and the Options granted hereunder shall be subject to the terms of the Plan. In the event of any conflict between the provisions of this Agreement and the terms of the Plan, the terms of the Plan shall govern.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first above written.

XENON PHARMACEUTICALS INC.

By: ______________________________ C/S

Title: Corporate Secretary

Signed by «First_Name» «Last_Name»	)	
in the presence of:	)	
	)	
______________________________	)	
Name	)	
	)	______________________________
______________________________	)	**«First_Name» «Last_Name»**
Address	)	
	)	
______________________________	)	

SCHEDULE “A”

OPTION EXERCISE FORM

TO: Xenon Pharmaceuticals Inc.
200-3650 Gilmore Way
Burnaby, BC, V5G 4W8

The undersigned hereby irrevocably gives notice, pursuant to the 2013 Equity Incentive Plan (the “**Plan**”) of Xenon Pharmaceuticals Inc. (the “**Company**”) and the share option agreement between the Company and the undersigned made on the ______ day of __________, 20______(the “**Share Option Agreement**”), of the exercise of the option (the “**Option**”) granted to the undersigned pursuant to the Plan and the Share Option Agreement and hereby irrevocably agrees to purchase (*cross out applicable item*):

all of the common shares; or

______ of the total number of common shares which may be purchased under the Option.

Calculation of total Exercise Price (as defined in the Plan):

number of common shares to be acquired on exercise: ______ common shares

times the exercise price per common share: $______

TOTAL EXERCISE PRICE, enclosed herewith:$______

The undersigned tenders to Xenon Pharmaceuticals Inc. herewith an amount equal to the total exercise price for the common shares being purchased, as calculated above, plus any amounts necessary to satisfy the tax withholding obligations in connection with such purchase. The exercise price may be satisfied pursuant to any of the authorized means set forth under Section 2.4 of the Share Option Agreement.

The undersigned directs the Company to issue the share certificate evidencing the common shares in the name of the undersigned to be mailed to the undersigned at the following address:

____
____
____
____

Until the issuance (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company) of the common shares, no right to vote or receive dividends or any other rights as a shareholder will exist with respect to the common shares subject to the Option, notwithstanding the exercise of the Option. The common shares so acquired will be issued in the name so designated above as soon as practicable after exercise of the Option. No adjustment will be made for a dividend or other right for which the record date is prior to the date of issuance, except as provided in Section 10.3(a) of the Plan.

The undersigned understands that the undersigned may suffer adverse tax consequences as a result of the purchase or disposition of the common shares. The undersigned represents that the undersigned has consulted with any tax consultants the undersigned deems advisable in connection with the purchase or disposition of the common shares and that the undersigned is not relying on the Company for any tax advice.

This notice and all matters arising hereunder will be governed by and construed in accordance with the laws of the Province of British Columbia. Subject to any written agreement between the parties, the parties will submit all their disputes arising out of or in connection with this notice to the exclusive jurisdiction of the courts of British Columbia.

DATED the ______ day of ______, ______

______________________________	______________________________
Signature of Witness	Signature of Participant
______________________________	______________________________
Name of Witness (*please print*)	Name of Participant (*please print*)

LEASE
BUILDING 10 – DISCOVERY PLACE
3650 GILMORE WAY, BURNABY, B.C.

BETWEEN

DISCOVERY PARKS INCORPORATED

AND

XENON GENETICS INC.

FMC

FRASER MILNER CASGRAIN

15th Floor, The Grosvenor Building, 1040 West Georgia Street, Vancouver, B.C., Canada V6E 4H8
Telephone (604) 687-4460 Fax (604) 683-5214 www.fmc-law.com

Montreal Ottawa Toronto Edmonton Calgary Vancouver

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LEASE
BUILDING 10 — DISCOVERY PLACE
3650 GILMORE WAY, BURNABY, B.C.

THIS INDENTURE made effective as of the 1st day of , 2001.

BETWEEN:

DISCOVERY PARKS INCORPORATED, duly incorporated under the laws of the Province of British Columbia under Incorporation No. 173252 and having an office at #602 – 1401 West Broadway, in the City of Vancouver, in the Province of British Columbia, V6H 1H6

(the "Landlord")

AND:

XENON GENETICS INC. duly incorporated under the laws of Canada under Incorporation No. A-52356 and having an office at 100 – 2386 East Mall, in the City of Vancouver, in the Province of British Columbia, V6T 1Z3

(the "Tenant")

WHEREAS:

A. The Landlord is the owner of the Land and Building described herein; and

B. The Landlord has agreed to lease the Building to the Tenant on the terms herein contained.

WITNESSES that in consideration of the rents, covenants and agreements hereinafter reserved and contained on the part of the Tenant to be paid, observed and performed the Landlord hereby demises and leases the Premises to the Tenant as hereinafter described all on the terms, conditions and covenants as hereinafter set forth.

1.0 PREMISES

1.1 The Premises means that portion of the Land located at 3650 Gilmore Way, Burnaby, British Columbia comprising a Rentable Area of approximately 56,776 square feet being the entire Building situated thereon, as set out in Schedule "A" attached hereto.

2.0 TERM

2.1 To have and to hold the Premises for and during the term of ten (10) years commencing on the Commencement Date and expiring on the day immediately prior to the tenth anniversary of the Commencement Date.

3.0 RENT

3.1 Yielding and paying therefor unto the Landlord at its office at #602 – 1401 West Broadway, Vancouver, B.C., V6H 1H8, or at such other place as the Landlord may direct in writing, Basic Rent for Premises in the sum set out hereunder together with applicable goods and services tax, payable in advance on the first day of each and every month of the Term as follows:

Period	**approximate annual Basic Rent**	**approximate monthly Basic Rent**
Years 1 – 5	$1,021,968 + GST (18.00 per square foot)	$85,164 + GST
Years 6 – 10	$1,107,132 + GST ($19.50 per square foot)	$92,261 + GST

3.2 The Landlord acknowledges receipt from the Tenant of a deposit of $170,685.33, including GST, which shall be paid to the Landlord on execution of this Lease and applied on account of the payment of Rent, Operating Expenses and Taxes for the first and second months of the Term during which the Tenant commences payment of Rent and after expiry of all rent free periods set out in this Lease. The deposit is to be placed in an interest bearing trust account with all interest accruing to the Tenant. Following execution of this Lease the deposit shall be held for the benefit of the Landlord, but interest thereon shall continue to be for the benefit of the Tenant. Interest shall be released to the Tenant on the first day of the second month of the Term in which the Tenant is obligated to pay Rent.

3.3 Upon determination of the actual Rentable Area by a surveyor appointed by the Landlord, the Rent shall be adjusted accordingly on the basis of the Rentable Area of the Premises multiplied by $18.00 per square foot per year for each of the first five years of the Term and $19.50 per square foot per year for each of the next five years of the Term.

3.4 This Lease shall be an absolutely net lease and the Annual Net Rent shall be net to the Landlord and shall be paid without set-off, abatement, deduction or counterclaim except as may be specifically provided for in this Lease or the Offer to Lease.

3.5 Notwithstanding the foregoing, the Tenant shall not be required to pay Basic Rent for the first four months of the Term but shall be required to pay Additional Rent during the first four months of the Term.

3.6 Notwithstanding the foregoing, the Tenant shall not be required to pay Rent during the Fixturing Period and any period of occupancy permitted under Section 10.3. In the event the Fixturing Period is extended as set out in Section 10.2 hereof, the abatement of Rent will also be extended during such extension to the Fixturing Period. In the event of force majeure as set out Section 22.1, the abatement of Rent set out herein shall commence upon the expiration of the period of force majeure.

3.7 The Landlord shall be obligated to pay to the Tenant the Leasehold Improvement Allowance in accordance with Section 31.0.

4.0 USE OF DEMISED PREMISES

4.1 The Tenant will use the Premises for Research and Development, general business, laboratory uses and for related business activities all in accordance with the zoning bylaws of the City of Burnaby, including without limitation the requirements of Discovery Place OCP dated February 14, 1996 and for no other purpose and, subject to the provisions of Sections 6.11 and 6.13 of this Lease, will not permit any part of the Premises to be used or occupied by any persons other than the Tenant, its employees and invitees.

5.0 DEFINITIONS

5.1 In this Lease, unless otherwise stated, the following terms will have the following meanings:

(a) “Additional Rent” means the amounts payable by the Tenant to the Landlord as described in Section 16.1 hereof and includes, without limitation, Operating Expenses and Taxes;

(b) “Audit” means a review by the Tenant’s Consultant of the Tenant’s practices with respect to Hazardous Substances for the prior year to ensure that all applicable Tenant Protocols have been followed, and which will itemize any incidents where a Tenant Protocol has not been followed and set out remedial measures to be taken by the Tenant in the upcoming year to avoid further breaches of the Tenant Protocol;

(c) “Authority” means any government agency, body, corporation, organization, department or authority responsible for administering or enforcing any Law;

(d) “Basic Rent” means the rent described in Section 3.1 hereof;

(e) “BOMA Standard” means the publication entitled ‘Standard Method for Measuring Floor Area in the Office Buildings’ as approved June 7, 1996, by American National Standards Institute, Inc., as identified by the publication reference ANSI/BOMA Z65.1-1996 and where the context requires, means the terminology and methodology described therein;

(f) “Building” means the building located at 3650 Gilmore Way, Burnaby, B.C., and in which the Premises are situated;

(g) “Building Rentable Area” means the total of all Rentable Areas in the Building;

(h) “Business Days” means the Monday to Saturday inclusive in each week, save and except any such day that be declared, by lawful authority, a holiday;

(i) “Commencement Date” means the day next following the last day of the Fixturing Period. If the Fixturing Period has not commenced by March 1, 2001, the Commencement Date shall be extended by one day for each day past March 1, 2001, the commencement of Fixturing Period is delayed.

(j) “Common Areas” means all of those portions of the Land not including the Building, improvements, facilities, amenities, utilities, installations, and equipment or portions thereof on the Land forming part of or being for the use of the Building;

(k) “Environment” has the meaning given to it in the Canadian Environment Protection Act (Canada) from time to time;

(l) “Existing Pollution” means Pollution of the Land or Building which has not been caused by the Tenant;

(m) “Fixturing Period” means the period described in Section 10.1 hereof;

(n) “Hazardous Substance” means any hazardous material or matter, whether in liquid, solid, or gas or other form, that is prohibited, regulated, controlled or licensed by any Laws;

(o) “Land” means that certain parcel or tract of land situate in Burnaby and more particularly known as a portion of PID: 019-179-758, Lot 2, District Lot 71, Group 1, NWD, Plan LMP21978;

(p) “Landlord’s Architect” means Bunting Coady Architects or such other architect as is designated in writing by the Landlord;

(q) “Landlord’s Consultant” means any qualified environmental consultant designated in writing by the Landlord;

(r) “Law” means any Federal, Provincial, Municipal, and other governmental laws and regulations relating to protection of the Environment or its Pollution including, without limitation, the Canadian Environmental Protection Act (Canada) and the Waste Management Act (British Columbia) and the regulations made under them and includes any amendment, revision, re-enactment or replacement of any such Law, regulation, or by-law;

(s) “Leasehold Improvement Allowance” means the amount set forth in Section 31.1 to be paid by the Landlord to the Tenant an account of the Tenant leasehold improvement expenditure;

(t) “Medium” means any land, water or air and includes the Land, Building and Premises;

(u) “Normal Business Hours” means the hours on Business Days from 7:30 a.m. to 6:00 p.m. from Monday to Friday inclusive and 8:00 a.m. until 1:00 p.m. on Saturday;

(v) “Offer to Lease” means the offer to lease made by the Tenant on December 11, 2000, and accepted by the Landlord on December 12, 2000;

(w) “Operating Expenses” means, without duplication or profit except any profit in respect of (viii) below, all expenses chargeable against income in connection with the operation, maintenance and repair of the Building, including all Common Areas and the Land and, without restricting the generality of the foregoing, includes;

  (i) fuel and operating expenses incurred in cleaning, heating, and ventilating the Building and providing water, natural gas, electrical service, telephone service, and sanitary and storm sewer services;

(ii) operating expenses incurred in cleaning and maintaining, including rubbish and snow removal, the sidewalks, roads, street lights, paving, surface parking lots, underground parking facilities, and landscaping on the Land;

(iii) water rates, special taxes and licenses (other than the Taxes or Tenant's Taxes or taxes on capital, income or profits), Building insurance, and utility expenses for the Common Areas;

(iv) salaries and wages (including employees' benefits, worker's compensation and other items of a similar nature) directly attributable to the Land and the cost of service contracts incurred in the cleaning, maintenance, repair and operation of the Building and the Land and payments made for security services provided to the Land;

(v) the cost of building and cleaning supplies used for the Building;

(vi) the cost of painting interior areas of the Building, not normally rented to tenants and costs of painting and otherwise maintaining the parking areas including both the underground and surface lots and the outside of the Building;

(vii) the cost of depreciation of HVAC machinery and equipment leased and the costs thereof being fully amortized over their useful life taking into account any reduction in their useful life occasioned by increased use of such HVAC machinery and equipment requested by the Tenant under Section 7.4 all as determined by the Landlord acting reasonably on the advice of a qualified consultant acceptable to the Tenant, acting reasonably, together with interest thereon calculated daily and compounded monthly at 2.0% per annum above the rate declared by HSBC Bank Canada as its "prime rate";

(viii) an allowance for management and overhead expenses of the Landlord not exceeding 3.75% of the gross income of the Building;

(ix) Landlord's costs of obtaining and maintaining insurance for liability, fire and other casualties in respect of the Building; and

(x) the costs incurred by the Landlord in making capital improvements to the Building which result in reduction of these Operating Expenses where such reduction during the remainder of the Term is greater than the current depreciated portion of such costs; and

Provided always that Operating Expenses shall not include leasing commissions, corporation capital tax or other capital taxes, depreciation (except as specifically provided herein), cost of structural repairs to the Building, interest on debt, or capital retirement of debt, the cost of repair or replacement of structural defects in the original construction of the Building and any other defect in the original construction of the Building where the cost of repair or replacement of such defect is covered by warranty by the contractor or supplier as the case may be or any amounts directly chargeable by the Landlord to any tenant or tenants as otherwise provided in this Lease;

(x) "Person" includes a person, firm, corporation, partnership, group of persons, or any combination of them and the personnel or other legal representatives of such person to whom the context can apply at law;

(y) "Pollute" is a verb which means to Release into or unto any Medium any Hazardous Substance that:

- (i) alters the physical, biological, or chemical nature of that Medium;
- (ii) alters the capacity of the Medium to support any living thing whether animal or plant life;
- (iii) injures or is capable of injuring the health or safety of a person in or near the Medium;
- (iv) injures or is capable or injuring property or any life form in or near the Medium;
- (v) interferes with or is capable of interfering with visibility or the dispersion of light or any photochemical activity within the Medium;
- (vi) interferes with or is capable of interfering with normal conduct of business in, on near or from the Medium;

(vii) causes or is capable of causing physical discomfort to a person in, on or near the Medium;

(viii) damages or is capable of damaging the Environment; or

(ix) is Special Waste,

and such Release is prohibited under any Law, or regulated, controlled or licensed under any Law if such Release exceeds the acceptable standard prescribed by such Law and “Polluted” is an adjective and “Pollution” and “Pollutant” are nouns which have meanings that correspond to the meaning contained in this clause.

(z) “Premises” means that portion of the Building described in Section 1M and shown outlined on Schedule “A”;

(aa) “Proportionate Share” means the ratio which the Rentable Area of the Premises bears to the Building Rentable Area of the Building;

(bb) “Pro Rata Portion” as applied to any amount means the Proportionate Share for the time for which the calculation is made as a fraction of whole of the period contemplated in the Lease;

(cc) “Release” includes release, spill, leak, pump, pour, dump, abandon, emit, empty, discharge, spray, inoculate, deposit, seep, throw, place, exhaust, inject, escape, leach, dispose, infuse or introduce other than in accordance with the applicable Tenant Protocol;

(dd) “Remedial Action” means any act, measure, work or thing done, taken, carried out, acquired or constructed that is or may be reasonably necessary to investigate, assess, control, abate, dissipate, render harmless, mitigate or remove Pollution in accordance with the requirements of any Authority having jurisdiction over a Pollutant;

(ee) “Rent” means the Basic Rent and Additional Rent;

(ff) “Rentable Area” has the meaning ascribed to it in the BOMA Standard;

(gg) “Research and Development” means the carrying on or application of scientific or technological research and development as described in the zoning by-laws of the City of Burnaby and the zoning requirements of Discovery Place OCP dated February 14, 1996, applicable to the Land in cooperation with governments or business and industry or foundations or technological institutions or universities or other educational institutions in the application of science and technology for the development of industry in British Columbia and shall, subject to the other terms of this Lease, include the right of the Tenant to develop and construct prototypes of goods or products, for the purpose of further research, development and testing as part of the carrying on of the Research and Development. In the process of developing the scientific or technological research and development, certain goods and products may be offered for sale;

(hh) "Taxes" mean all taxes, rates and assessments, whether general or special, levied or assessed by the municipal authority for such purposes payable by the Landlord in respect of the Building and the Land and include any other taxes, rates and assessments payable by the Landlord which are imposed in substitution of the foregoing taxes, rates and assessments as finally determined for each calendar year as a result of assessment, appeal or judicial review and include any reasonable legal fees or appraiser's fees incurred by the Landlord in respect of such final determination, but excluding development cost charges or other amounts levied by the municipalities authorities in relation to the original development of the Land or construction of the Building;

(ii) "Tenant's Consultant" means any qualified environmental consultant designated in writing by the Tenant acceptable to the Landlord, acting reasonably;

(jj) "Tenant's Environmental Management Plan" means a written plan prepared by the Tenant's Consultant addressing how the Tenant shall manage any environmental risks including any Hazardous Substances involved in its business in the Premises during the Term;

(kk) "Tenant's Protocol" means, with respect to a Hazardous Substance, a written procedure prepared by the Tenant's Consultant in accordance with the Tenant's Environmental Management Plan detailing how the Hazardous Substance will be transported, received, handled, stored, used and disposed of, including procedures to be followed if there is a Release of Hazardous Substance other than in accordance with the Tenant Protocol;

(ll) "Tenant's Taxes" means all taxes, licenses, rates, duties and assessment imposed or levied by lawful authority covering any period during the Term and relating to or in respect of the business or profession of the Tenant or relating to or in respect of improvements, fixtures, machinery or chattels or equipment brought onto the Premises by the Tenant or being the property of the Tenant or relating to or in respect of improvements to the Premises built, made or installed by the Tenant or at the Tenant's request, or being any special or additional taxes, licenses, rates, duties and assessments which the Tenant or any sub-Tenant or licensee of the Tenant shall elect or cause to have the Premises or any part thereof assessed or charged with, whether any such taxes, licenses, rates, duties and assessments are payable in law by the Tenant or by the Landlord and whether such taxes, licenses, rates, duties and assessments are included by the taxing authority in the taxes, licenses, rates, duties and assessments or levied on or with respect to the Building;

(mm) "Tenant's Work" mean's the Tenant's leasehold improvements as defined under Schedule "B" of the Offer to Lease; and

(nn) "Term" means the term of this Lease described in Section 2.0.

6.0 <u>COVENANTS OF TENANT</u>

The Tenant covenants with the Landlord:

6.1 To pay Rent as and when due;

6.2 To pay the cost of electricity, gas and other utilities used within the Premises, such costs to be paid by the Tenant as and when due.

6.3 Subject to Section 12.0, to repair the Premises, reasonable wear and tear, structural repairs, and damage by fire, lightning and other casualties against which the Landlord is insured, or for which the Landlord is required to be insured under this Lease, only excepted.

6.4 Subject to Section 7.7, that, upon providing not less than 48 hours' written notice specifying a specific time for entry, the Landlord may enter and view the state of repair and that the Tenant will repair according to notice save as aforesaid.

6.5 That the Tenant will leave the Premises in good repair, save as aforesaid.

6.6 If the Tenant fails to repair in accordance with the provisions hereof, the Landlord may on 10 days prior written notice except in the case of an emergency enter the Premises and make the required repairs and, for that purpose, the Landlord may bring and leave on the Premises all necessary tools, material and equipment and the Landlord will not be liable to the Tenant for any inconvenience, loss, injury or damages suffered by the Tenant thereby, unless caused by the negligence or willful misconduct of the Landlord or those for whom the Landlord is responsible at law, and the expense of such repair will be borne by the Tenant which will pay it to the Landlord forthwith on demand.

6.7 To restore forthwith at its expense broken or damaged plate glass on the Premises from time to time.

6.8 Not to do, suffer or permit any act or neglect which may in any manner directly or indirectly cause injury to the Premises or to the Building of which the Premises form a part or to any fixtures or appurtenances thereof, or which may be or become a nuisance or interference with the comfort of any of the occupants of the Building or which may in the reasonable opinion of the Landlord render the Building or any part thereof less desirable or injure the reputation thereof as a first-class office building.

6.9 Not to exhibit signs of any nature on exterior walls, doors or windows of the Premises without the prior written approval of the Landlord, such approval not to be unreasonably withheld or delayed. Notwithstanding the foregoing, the Tenant will be allowed:

(a) to display a sign on the standard building directory signage to be provided by the Landlord in a manner to be consistent with a suburban business park;

(b) the option to install prominent signage on the exterior of the Building and pedestal signage adjacent to the entrance to the Building, including the Building name set out herein,

all of which shall subject to the approval of the City of Burnaby or any governing authorities. The Landlord agrees to name the Building "The Xenon Genetics Building". The Landlord acknowledges and agrees that neither the Tenant's signage on the Building, nor the use of the Tenant's name in the name of the Building shall grant the Landlord any rights or interest in the Tenant's name or any derivation thereof nor will the Landlord be permitted to continue to use the Tenant's name in the name of the Building or otherwise after expiry or sooner termination of this Lease (or such earlier date as the Tenant so notifies the Landlord in writing). At the expiration or sooner termination of this Lease, the Tenant shall, upon request by the Landlord forthwith, remove any sign installed by the Tenant pursuant to sub-Section 6.9(b).

6.10 Not to do or permit anything to be done whereby any policy of insurance on the said Building or any part thereof placed by the Landlord or any other Tenant in the Building may become void or voidable or whereby the premium thereon may be increased, and if the Tenant is in breach hereof and as a result of such breach any premium of any such policy is increased, the Tenant will forthwith pay to the Landlord the amount of the increase in such premium, provided that nothing herein will limit any other remedy of the Landlord or any other Tenant provided this Section will not apply to the Tenant's proposed use of the Premises by the Tenant.

6.11 The Tenant shall not assign or sublet the Premises in whole or in part without the prior consent in writing of the Landlord, such consent not to be unreasonably or arbitrarily withheld or delayed where the Tenant wishes to assign or sublet to a tenant, which covenants to use the Premises for only those uses permitted in Section 4.1, provided that the Tenant, at the time the Tenant requests the consent of the Landlord, delivers to the Landlord such information in writing (the "Required Information") as the Landlord may reasonably require respecting the proposed assignee or subtenant, provided always that no such assignment or subletting, whether consented to by or not by the Landlord, will:

(a) in any manner release the Tenant from any covenant to be observed or performed by it, and

(b) be made to any person, firm, partnership or corporation carrying on any business which the Landlord is obliged to restrict by reasons of any other lease or contract in respect of any occupancy of a portion of the Building.

6.12 A change in control of the Tenant shall be deemed to be an assignment for purposes of Section 6.11. This provision however, shall not apply to any transaction in which the Tenant becomes a public company or any transaction or change in control in the Tenant while the Tenant is a public company.

6.13 Notwithstanding Section 6.11, the Tenant shall be permitted to sublease a portion of the Premises to Electronic Arts (Canada) Inc. without consent of, but with notice to, the Landlord provided that Electronic Arts. (Canada) Inc. agree, inter alia, to be bound by the covenants of the Tenant under this Lease except the covenant to pay Rent and Additional Rent. Notwithstanding any sublease permitted under this Section 6.13 or any requirement in the sublease for Electronic Arts (Canada) Inc. to observe any obligations set out in this Lease, the Tenant shall not be released from any obligation contained in this Lease including, without limitation, from any covenant to be observed or performed by the Tenant under this Lease.

6.14 The Tenant is allowed to profit on any assignment or subletting permitted by Sections 6.11 or 6.13.

6.15 Notwithstanding any assignment or sublease of this Lease of all or a portion of the Premises, whether consented to or not by the Landlord, the Landlord shall not be obligated to pay any Leasehold Improvement Allowance (defined hereafter) to any assignee or sublessee but shall only be obligated to make any Leasehold Improvement Allowance to the Tenant as set out in this Lease.

6.16 To keep the Premises free of rubbish and debris at all times and to provide proper and sufficient receptacles for waste.

6.17 Environmental Considerations

6.17.1 The Tenant must not at any time cause or allow any Hazardous Substance to be generated, created, used, stored, treated, transferred, transported or disposed of on the Land or Building except in compliance with all Laws and the Tenant's Environmental Management Plan and shall not use the Premises in any manner which, in whole or in part, would cause the Land to be a contaminated site or similar designation under any Law.

6.17.2 Prior to the Commencement Date, the Tenant shall prepare and deliver to the Landlord the Tenant's Environmental Management Plan.

6.17.3 The Tenant shall provide the Landlord with a copy of any Tenant Protocol required by the Tenant's Environmental Management Plan.

6.17.4 If there is a Release of a Hazardous Substance on or about the Premises as a result of an act or omission of the Tenant, the Tenant will follow the remedial procedures set out in the applicable Tenant Protocol. If the Release has the potential to Pollute the Land or poses a risk to persons in or about the Land, the Tenant will forthwith notify the Landlord of the Release and the remedial action being taken by the Tenant.

6.17.5 Within 60 days of each anniversary of the Commencement Date during the Term and within 60 days of the expiry of the Term, the Tenant will cause an Audit to be performed and deliver a copy of that Audit to the Landlord. If the Audit includes remedial measures to be followed by the Tenant to ensure future compliance with the Tenant Protocols, the Tenant will be obliged to enact such remedial measures.

6.17.6 The Tenant shall be responsible at its sole expense for remediation of any Pollution of the Land or Building caused by a Release by the Tenant of a Hazardous Substance. The Tenant will indemnify and save harmless the Landlord from any cost, damage, loss or liability reasonably incurred, or suffered, by the Landlord as a result or in respect of any Pollution of the Land or Building caused by the Tenant. This indemnity will survive the expiry or earlier termination of this Lease.

6.17.7 The Landlord will indemnify and save harmless the Tenant from any cost, damage, loss or liability reasonably incurred, or suffered, by the Tenant as a result or in respect of any Existing Pollution. This indemnity will survive the expiry or earlier termination of this Lease.

6.17.8 If there is an intermingling of Pollution caused by the Tenant and Existing Pollution, the Landlord and the Tenant will share the costs of remediating such intermingled Pollution based on a reasonable allocation determined in accordance with the allocation principals in the Waste Management Act.

6.17.9 If the Landlord is required by any Authority to determine whether the Land and Building are Polluted or to take Remedial Action regarding Pollution of the Land or Building:

(a) the Landlord shall notify the Tenant and provide it with a copy of all materials received from the Authority with respect to the Pollution and Remedial Work;

(b) the Landlord and the Tenant, each acting reasonably, shall cooperate with each other to challenge any aspect of the order of the Authority which either party reasonably believes is incorrect or unjustified and to negotiate with the Authority Remedial Action that is acceptable to the Landlord and the Tenant, each acting reasonably;

(c) if the Pollution has been caused by the Tenant, the Tenant shall take any Remedial Action which the Authority ultimately requires be taken; and

(d) if the Pollution has not been caused by the Tenant, the Landlord shall take any Remedial Action which the Authority ultimately requires be taken.

6.17.10 If the Landlord is required by any Authority to take Remedial Action regarding Pollution of the Land or Building not caused by the Tenant, the Landlord or its respective employees and agents may enter the Premises and may:

(a) perform any audits, investigations and surveys the Landlord or any Authority considers necessary to determine better the nature and extent of the Pollution and the necessary Remedial Action, and

(b) take any Remedial Action any Authority requires be taken and the Tenant must permit the Landlord, its employees and agents including the Landlord's Consultant to have that access to the Premises which is reasonably necessary in the opinion of the Landlord to enable it to comply with the requirements of any Authority and to take Remedial Action,

provided that the Landlord will take all reasonable steps to minimize the effect of such work on the Tenant and its business. The Landlord shall not enter the Premises for any such purpose without providing at least 48 hours written notice and specifying a particular time when it proposes to enter the Premises so that the Tenant may arrange any appropriate escort. The provisions of section 7.7 of this Lease shall apply to any entry into the Premises permitted by this section 6.17.10.

6.17.11 The Tenant shall cooperate with the Landlord in the provision of such information at the times and in the form required by the Landlord, acting reasonably, to ensure the, proper monitoring and supervision of the Land and Building with respect to Pollution.

6.17.12 At the expiry or earlier termination of this Lease the Tenant shall remove at its sole cost and expense any Hazardous Substances which the Tenant has stored within the Premises.

6.18 To abide by and comply with all laws, rules and regulations of every municipal or other authority which in any manner relate to or affect the business of the Tenant or the use of the Premises by the Tenant.

6.19 To pay the Landlord all charges for maintenance and cleaning of electrical and lighting fixtures and fittings in the Premises and the same is included in "Operating Expenses" herein. The Landlord will have the exclusive right to attend to such maintenance and cleaning and may adopt a system of periodical renewals on a group basis in accordance with good practice in this respect.

6.20 To maintain at the Tenant's sole expense but for the common benefit of the Landlord and the Tenant:

(a) comprehensive general public liability insurance including bodily injury, death and property damage, on an occurrence basis with respect to the use of the Premises and the Tenant's use and occupancy thereof in an amount not less than $2,000,000.00; and

(b) fire and extended coverage insurance on the Tenant's improvements to the replacement cost thereof, and such insurance to be in form and with insurers acceptable to the Landlord, acting reasonably, and the Tenant will deliver promptly to the Landlord a certificate confirming that the Tenant has such insurance if so required by the Landlord.

6.21 To immediately advise the Landlord and do all things necessary to remove any dangerous condition from time to time existing on the Premises and arising as result of the act of or omission of the Tenant, its agents or servants.

6.22 To indemnify and hold harmless the Landlord from and against all actions, causes of action, suits, claims, demands, damage expense, liens or rights of lien whatsoever arising out of the occupancy of the Premises hereunder save for negligence or willful misconduct of the Landlord and those for whom the Landlord is at law responsible.

6.23 To pay to the Landlord interest at 5% per annum above the rate of interest declared from time to time by the main branch of HSBC Bank Canada as its ‘prime rate’, compounded annually, on any amount not paid as and when due hereunder until paid.

6.24 If the Tenant wishes to register this Lease in the appropriate Land Title Office, the Tenant may do so at the Tenant’s sole cost.

7.0 COVENANTS OF LANDLORD

The Landlord covenants with the Tenant:

7.1 For quiet enjoyment.

7.2 To complete the Building, including the Landlord’s (Base Building) Work as set out in the Offer to Lease and Schedule “B” attached thereto, to the extent required to allow the Tenant to occupy the Premises by the commencement of the Fixturing Period for purposes of completing the Tenant’s Work.

7.3 To supply water and other utilities to the Premises for the normal and reasonable requirements of the Tenant and at the Tenant’s expense without, in any case, being liable for any loss, damage or inconvenience resulting from failure of the supply of utilities to the Building.

7.4 To provide, maintain and operate during Normal Business Hours, and outside of Normal Business Hours at the request of the Tenant at the sole additional cost of the Tenant, an efficient heating, ventilating and air conditioning system where provided in the Building. The Tenant shall be solely responsible to maintain, operate, repair, and replace any heating, ventilation and air conditioning system not provided by the Landlord as part of the Landlord's (Base Building) Work which has been installed or constructed by the Tenant as part of the Tenant's Work.

7.5 The Landlord shall take out or cause to be taken out and keep or cause to be kept in full force and effect:

(a) "all risk" insurance on the Buildings and improvements in an amount such as would be carried out by a prudent owner, subject to such deductions and exceptions as the Landlord may determine, acting as a reasonably prudent landlord, against fire and such other hazards covered by policies normally in use from time to time for buildings and improvements of a similar nature similarly situated;

(b) comprehensive public liability insurance in respect of the Building of a kind and in an amount such as would be carried by a prudent owner, subject to such deductions and exceptions as the Landlord may determine, acting reasonably;

(c) loss or rental income insurance not exceeding Basic Rent, Additional Rent, Operating Expenses and Taxes for the Building of which the Premises form a part for a period not exceeding eighteen (18) months;

provided that nothing herein shall prevent the Landlord from insuring with broader coverage, acting as a reasonably prudent landlord.

7.6 Each policy of insurance carried by the Landlord hereunder shall contain a waiver of the insurer's right of subrogation against the Tenant and each policy of insurance carried by the Tenant pursuant to this Lease shall contain a waiver of the insurer's right of subrogation against the Landlord.

7.7 Except in the case of an emergency when no representative of the Tenant is available, in accordance with Section 6.17, or following default by the Tenant, not to enter the Premises without an escort designated by the Tenant unless the Tenant specifically confirms otherwise or a representative of the Tenant fails to attend with the Landlord at the specific time identified by the Landlord in any notice required to be provided to the Tenant by the Landlord prior to entry into the Premises as may be set out in this Lease. The Tenant shall not be liable to the Landlord or any other party acting on behalf of the Landlord for any loss, damage, cost or injury arising in connection with any unescorted entry by the Landlord or any other party acting on behalf of the Landlord into the Premises and the Landlord hereby releases the Tenant for any liability arising therefrom.

7.8 To operate, manage and maintain the Building as a first class suburban office park building.

7.9 To repair and maintain, at its sole expense, the structural elements of the Building.

8.0 ALTERATIONS AND IMPROVEMENTS

8.1 Save for the installation of trade fixtures and furnishings, the Tenant will make no alterations, installations, removals, additions or improvements in or about the Premises without the Landlord's prior written consent, which consent will not be unreasonably withheld or delayed, and in the event of such consent, all work is done at the Tenant's sole expense and at such times and such manner as the Landlord may reasonably approve.

8.2 The Tenant will not suffer or permit any builders' liens to be filed against the interest of the Landlord in the Land or the Premises by reason of work, labour, services or material supplied or claimed to have been supplied to the Tenant or for which the Tenant may be in any way obligated, and if any such builders' lien will at any time be filed against the Land or the Premises whatsoever, the Tenant will cause the same to be discharged from title to the Land within 20 days of the date the Tenant has knowledge of such filing. The Landlord may wish to post security under the provisions of the *Builders Lien Act* or any legislation replacing such Act.

8.3 All articles of personal property and all business and trade fixtures, machinery and equipment, cabinet work, furniture and movable or immovable partitions owned or installed by the Tenant at the expense of the Tenant in the Premises will remain the property of the Tenant and may be removed by the Tenant at any time during the Term, provided that the Tenant at its expense will repair any damage to the premises or the Building caused by such removal of the original installation.

8.4 The Landlord may elect to require the Tenant to remove all or any part of the business and trade fixtures, machinery and equipment, cabinet work, furniture and movable and immovable partitions owned or installed by or on behalf of the Tenant after the commencement of the Term (other than those which constitute ordinary and reasonable commercial fixtures and improvements which would be reasonably useable by other commercial tenants) at the expiration of this Lease in which event such removal is done at the Tenant's expense and the Tenant will, at its expense, repair any damage to the Premises or to the Building caused by such removal.

8.5 If the Tenant does not remove the property set out in Section 8.4 forthwith after written demand by the Landlord, such property will, if the Landlord elects, be deemed to become the Landlord's property and the Landlord may remove the same at the same at the expense of the Tenant and the cost of such removal will be paid by the Tenant forthwith to the Landlord on written demand and the Landlord will not be responsible for any loss or damage to such property because of such removal.

9.0 IMPROVEMENT OF PREMISES

9.1 The Landlord shall construct the Building diligently and in a good and workmanlike manner in such a manner that it shall be considered as a first class suburban office building. The Landlord shall complete the Landlord's (Base Building) Work described as Landlord's Work in Schedule "B" the Offer to Lease prior to the commencement of the Fixturing Period.

9.2 Any Tenant's Work or improvements undertaken by the Tenant shall be completed in accordance with the terms of the Offer to Lease and Schedule "B" thereto.

9.3 Without limiting the generality of the foregoing, all Tenant's Work shall be approved by the Landlord in advance and the Landlord shall act reasonably and without delay in its review of the Tenant's working drawings.

10.0 FIXTURING PERIOD

10.1 The Fixturing Period means the period of ninety (90) days from the date the Landlord's (Base Building) Work is substantially completed and the Premises are turned over to the Tenant for purposes of the Tenant's Work. The Landlord shall provide the Tenant with no later than thirty (30) days notice that the Landlord's (Base Building) Work will be completed and ready for commencement of the Fixturing Period. The Landlord may provide notice to the Tenant of the commencement of the Fixturing Period at any time following execution of the Offer to Lease whether or not this Lease has been executed by the parties hereto. If the Fixturing Period has not commenced by March 1, 2001, the Tenant may, at it sole option, terminate this Lease and the deposit, plus all accrued interest, shall be returned to the Tenant.

10.2 The Tenant shall have exclusive possession of the Premises for at least the last 45 days of the Fixturing Period. In the event the Tenant is unable to obtain exclusive possession for at least the last 45 days of the Fixturing Period, then the Fixturing Period will be extended to such date in order to allow the Tenant exclusive possession of the Premises for 45 consecutive days. In any event, the Tenant's possession of the Premises during the balance of the Fixturing Period may be in common with the Landlord, provided the Landlord shall use all reasonable best efforts to ensure its contractors do not interfere with the construction and installation of the Tenant's Work.

10.3 Prior to the commencement of the Fixturing Period, but following substantial completion of the Landlord's (Base Building) Work, the Landlord shall allow the Tenant to occupy the Premises on the first day following the day on which the Landlord can provide lawful occupancy to the Tenant for the purposes of allowing the Tenant to perform the Tenant's Work. Any period which the Tenant is allowed to occupy the Premises under this Section 10.3 shall be Basic Rent and Additional Rent free and shall not reduce the Fixturing Period.

11.0 SUBORDINATION

11.1 This Lease will, at the request of the Landlord, be made subject and subordinate to all mortgages which now or hereafter during the Term is recorded in the appropriate Land Title Office as a mortgage against the Land and Premises. The Tenant will execute promptly from time to time any assurance the Landlord may properly require to confirm this subordination with respect to any mortgage now or hereafter recorded provided that the Mortgagee provides to the Tenant a written non-disturbance agreement from any mortgagee in a form acceptable to the Tenant, acting reasonably.

11.2 Whenever required by any Mortgagee or a Trustee on behalf of a Mortgagee of any mortgage as contemplated in Section 10.1, the Tenant will attorn to and become a Tenant or Licensee of such Mortgagee or Trustee or any purchaser from the Mortgagee or Trustee in the event of an exercise by the Mortgagee or Trustee of its power of sale in the mortgage set out for the then unexpired residue of the Term upon all of the terms and conditions hereof, provided that such Mortgagee or Trustee has provided a non-disturbance agreement as contemplated in Section 11.1, subject to the terms of the non-disturbance agreement.

11.3 Whenever required by the Landlord, any Mortgagee or a Trustee on behalf of a Mortgagee, the Tenant shall promptly execute an estoppel certificate confirming this Lease and the significant business terms.

12.0 PROPERTY ETC. DAMAGE

12.1 The Landlord will not be liable for any injury or damage to persons or property resulting from fire, explosions, failing plaster, steam gas, electricity, water, rain, snow or leaks from any part of the Building or from pipes, appliances or plumbing works or from the roof, street or subsurface or from any other place unless caused by the negligence of the Landlord, its servants or agents, or those for whom the Landlord is responsible at law.

12.2 The Tenant will reimburse and indemnify and save harmless the Landlord for and from all expense, damages, loss or fines incurred or suffered by the Landlord by reason of any breach, violation or nonperformance by the Tenant of any covenant or provision of this Lease or by reason of damage which is caused by the Tenant, its servants or agents.

12.3 The Tenant will give the Landlord immediate notice in case of fire or accident in the Premises or in the Building of which the Tenant is aware.

13.0 DAMAGE TO OR DESTRUCTION OF PREMISES

13.1 If the Premises are damaged by fire or other casualty or if the Building is so damaged thereby restricting the use of the Premises then the Rent will abate in whole or in part according to the portion of the Premises which is non-usable by the Tenant until such damage is repaired and the Tenant is able to operate its business therefrom.

13.2 Except as provided in Section 12.3 if the Premises is damaged by fire or other casualty, the damages to the Premises will be repaired by the Landlord at its expense except that repairs to alterations or improvements made by the Tenant at its expense will be performed by the Landlord at the expense of the Tenant and the Tenant will at its own expense make all repairs and replacements of property which the Tenant is entitled to remove pursuant to Section 8.3. All repairs which the Landlord is required to make hereunder will be made with due diligence provided that the Landlord will not be liable to the Tenant for any loss or damage suffered by the Tenant as a result of any reasonable delay which may arise by reason of adjustment of insurance on the part of the Landlord on account of labour troubles or any other cause beyond the Landlord’s control.

13.3 If the Premises are rendered untenantable by fire or other casualty and if the Landlord decides not to restore the same or if the Building is so damaged that the Landlord will decide not to restore it or it is determined by the Landlord, acting reasonably, that the Building or the Premises cannot be restored within 6 months of such damage, then in any of such events, the Landlord will, within 45 days after such fire or other casualty, give to the Tenant a notice in writing of such decision and within 30 days thereafter either the Landlord or Tenant may elect to terminate this Lease by notice in writing, the Term will expire forthwith, and the Tenant will vacate the Premises and surrender the same to the Landlord. If the Landlord does not give notice as aforesaid and the Premises or the Building, as the case may be, are not restored within six months from the time of the fire or other casualty causing the damage (subject to such time period being extended by the length of any reasonable delay which may arise by reason of adjustment of insurance on the part of the Landlord on account of labour troubles or any other cause beyond the Landlord's control) the Tenant may at its option, to be exercised within 10 days of the termination of said period of six months (or the termination of such later period as extended hereby) by notice in writing, terminate this Lease forthwith. Upon the termination of this Lease under the conditions provided in this clause the Tenant's liability for Rent will cease as of the day following the fire or casualty.

14.0 ACCESS TO DEMISED PREMISES

14.1 The Tenant will permit the Landlord to erect, build, use and maintain unexposed pipes, ducts and conduits in and through the Premises, Subject to Section 7.7, the Landlord its servants and agents will have the right to enter the Premises at reasonable times upon 48 hours written notice to examine the same and make such repairs, alterations, improvements or additions as the Landlord may deem necessary or desirable in the Premises or as the Landlord may be required to make by law or in order to repair and maintain the Building, and the Landlord will be allowed to take all material into the Premises that may be required therefor without the same constituting eviction of the Tenant in whole or in part and the Rent reserved will in no way abate while said repairs, alterations, improvements, or additions are being made by reason of interruption of the business of the Tenant. The Landlord will exercise reasonable diligence as to minimize the disturbance or interruptions of the Tenant's operations.

14.2 During the six months prior to the expiration of the Term or any renewal term, the Landlord may exhibit the Premises during Normal Business Hours to prospective tenants upon reasonable notice to the Tenant and for such purposes the Landlord, subject to Section 7.7 will have the right of entry to the Premises at any reasonable time and the Tenant at its option may have any servant or agent present at the time of such entry. The Landlord will have the right during the last six months of the Term to place upon the Premises a notice of reasonable dimensions and reasonably placed so as not to interfere with the business of the Tenant, stating that the Premises are for rent and further provided that the Tenant will not remove such notice or permit the same to be removed.

15.0 OPERATING EXPENSES AND TAXES

15.1 The Tenant will promptly pay the Tenant’s Taxes as they become due and shall pay goods and services taxes applicable to Rent and Additional Rent when due.

15.2 If the Landlord is required by lawful authority or considers it desirable to pay the Tenant’s Taxes which the Tenant fails or neglects to pay, the Tenant will pay the amount thereof to the Landlord forthwith after written request thereof.

15.3 The Tenant will pay to the Landlord its Proportionate Share of Operating Expenses and Taxes payable in 12 equal installments with the monthly payments of Rent as and when required hereunder. The Landlord will, within 90 days of its year-end, provide the Tenant with annual statements as to Operating Expenses and Taxes paid by the Tenant during the year. The Landlord will, at the Tenant’s request by written notice given within 180 days after receipt of such statements, permit the Tenant to review invoices relating to those Operating Expenses contained in the annual statements at a time or times convenient to the Landlord, acting reasonably.

15.4 The Landlord may, at its option from time to time estimate the amount which may be payable by the Tenant pursuant to Section 14.3 and the Tenant will pay to the Landlord with the monthly payments of Rent as and when required hereunder its Proportionate Share thereof so that the Landlord will have sufficient funds on hand to pay the Operating Expenses and Taxes as they become due and payable. The Landlord will promptly refund to the Tenant any amount of any overpayment by the Tenant by reason that the estimate aforesaid paid by the Tenant exceeds the actual amount payable by the Tenant.

15.5 The certificate of an independent certified accountant appointed by the Landlord will in the event of a dispute be conclusive and binding upon the Landlord and the Tenant as to any amount payable from time to time under this Section 14.0 and the reasonable cost of obtaining such certificate is borne equally by the Landlord and the Tenant.

15.6 The Tenant shall pay good and services tax applicable to all Additional Rent payable hereunder.

16.0 ADDITIONAL RENT AND PRO RATA PORTION OF PAYMENTS

16.1 Any money payable by the Tenant to the Landlord hereunder other than the Basic Rent expressed in Section 3.0 and goods and services tax is deemed to be Rent and is paid as Additional Rent and is collectible as such and in the absence of any other provisions hereunder, is payable with the next ensuing monthly installment of Rent.

16.2 If the Term will commence or cease on a day other than the commencement or end of any period contemplated herein or if any money is payable hereunder for a period less than that contemplated in relation thereto, the Tenant will pay to the Landlord its Pro Rata Portion of the Rent or such payment for the period.

16.3 Goods and services tax payable hereunder shall not be deemed to be Rent, but the Landlord shall have all remedies for non-payment of goods and services tax payable as it would for Rent in arrears.

16.4 The Tenant acknowledges that the Tenant is required to pay provincial sales tax under the Social Services Tax Act on the parking stall charges set out in Section 29.1(b) and the Landlord shall have all remedies for non-payment of the sales tax payable as it would for Rent in arrears.

17.0 DEFAULT

17.1 The Tenant covenants with the Landlord that if the Tenant violates or neglects any covenant, agreement or stipulation herein contained on its part to be kept, performed or observed and any such default on the part of the Tenant continues for 15 days after written notice thereof to the Tenant by the Landlord (provided that if such default cannot reasonably be remedied within 15 days, then the Tenant shall not be in default if the Tenant commences to remedy the default within such 15-day period and proceeds with all reasonable diligence), or if any payments of Rent or any part thereof, whether the same are demanded or not, are not paid within five days after written demand by the Landlord, then and in any such case the Landlord in addition to any other remedy now or hereafter provided by law may at its option cancel and annul this Lease forthwith and re-enter and may remove all persons and property and may use such force and assistance in making such removal as the Landlord may deem advisable to recover at once full and exclusive possession of the Premises and such re-entry will not operate as a waiver or satisfaction in whole or in part of any right, claim or demand arising out of or connected with any breach or violations by the Tenant of any covenant or agreement on its part to be performed.

17.2 If the Term or any renewal thereof or any of the goods or chattels of the Tenant are at any time seized or taken in execution or attachment by any creditor of the Tenant or if the Landlord makes any assignment for the benefit of creditors or becomes bankrupt or insolvent or takes the benefit of any bankruptcy or insolvency legislation, the then current month’s Rent together with the Rent accruing for the next three months will immediately become due and payable, and the Term or any renewal thereof will at the option of the Landlord become forfeit and void, and it is lawful for the Landlord at any time thereafter to re-enter into or upon the Premises or any part thereof in the name of the whole and the same to have again, repossess and enjoy as of its former estate, notwithstanding anything herein contained to the contrary and neither this Lease nor any interests therein nor any estate hereby created will pass or enure to the benefit of any trustee in bankruptcy or any receiver or assignee for the benefit of creditors or otherwise by operation of law.

18.0 DISTRESS

18.1 Whensoever the Landlord is entitled to levy distress against the goods and chattels of the Tenant it may use such force as it may deem necessary for the purpose and for gaining admission to the Premises without being liable for any action in respect thereof or for any loss or damage occasioned thereby and the Tenant hereby expressly releases the Landlord from all action, proceedings, claims or demand whatsoever for or on account or in respect of any such forcible entry or any loss or damage sustained by the Tenant in connection therewith.

19.0 LANDLORD'S EXPENSES ENFORCING LEASE

19.1 If it is necessary for the Landlord to retain the services of a solicitor or any other proper person for the purpose of assisting the Landlord in enforcing any of its rights hereunder in the event of default on the part of the Tenant which is substantiated by a court of law, it is entitled to collect from the Tenant the cost of all such services including all necessary court proceedings at trial or on appeal on a solicitor and own client basis as if the same were Rent reserved and in arrears hereunder.

20.0 WAIVER

20.1 The failure of either party to insist upon strict performance of any covenant or condition contained in this Lease or to exercise any right or option hereunder will not be construed as a waiver or relinquishment for the future of any such covenant, condition, right or option.

20.2 The acceptance of any Rent from or the performance of any obligation hereunder by a person other than the Tenant will not be construed as an admission by the Landlord of any right, title or interest of such person as a sub-Tenant, assignee, transferee or otherwise in the place and stead of the Tenant.

20.3 The acceptance by the Landlord of part payment of any sums required to be paid hereunder will not constitute waiver or release of the right of the Landlord to payment in full of such sums.

21.0 HOLD OVER

21.1 If at the expiration of the Term the Tenant continues occupation with the consent of the Landlord, the tenancy of the Tenant thereafter will, in the absence of written agreement to the contrary, be from month-to-month only at a rental per month equal to one hundred twenty-five percent of the monthly rental payable for the year immediately proceeding such expiration, payable monthly in advance on the first on the first day of each lease month and will be subject to all other terms and conditions of this Lease.

22.0 INABILITY TO PERFORM/FORCE MAJEURE

22.1 The Landlord does not warrant that any service of facility provided by it hereunder will be free from interruptions caused or required by strikes, riots, insurrections, labour controversies, force majeure, act of God or other cause or causes beyond the Landlord's reasonable care and control. No such interruptions will be deemed an eviction or disturbance of the Tenant's enjoyment of the Premises nor render the Landlord liable in damages to the Tenant nor relieve the parties from their obligations under this Lease provided that both parties will, without delay, take all reasonable steps to remove the cause of such interruption and minimize the delays.

22.2 All of the dates and payment obligations will be extended because of Force Majeure for the purposes hereof. Force Majeure means any delays by the Landlord or the Tenant in completing any of the terms, obligations, or conditions contained in the Offer to Lease, which delay is directly or indirectly caused by labour strikes, power failures, restrictive government laws or regulations not in place at the time of signing the Offer to Lease, riots, insurrections, sabotage, war, rebellion or acts of God or other causes beyond the Landlord's or the Tenant's reasonable control. No such interruption shall render the Landlord or the Tenant liable in damages to the other, nor relieve either party from its obligations under this Lease, provided that both parties shall, without delay, take all reasonable and practical steps within its power to remove the cause of such interruption and minimize the delays. This clause does not excuse delays caused by normal weather patterns within the Burnaby area.

23.0 RULES AND REGULATIONS

23.1 The Tenant and its servants, employees and agents will observe faithfully and comply strictly with such rules and regulations as the Landlord may from time to time adopt, acting reasonably and provided at least 30 days' prior written notice of any such rules and regulations shall be given to the Tenant. Nothing in this Lease contained will be construed to impose upon the Landlord any duty or obligation to enforce the rules and regulations or the terms, covenants or conditions in any other lease against any other tenant of the Building, and the Landlord will not be liable to the Tenant for violation of the same by any other tenant, its servants, employees, agents, visitors or licensees.

23.2 The Landlord confirms that while the Tenant is the sole tenant of the Building, the Landlord will not adopt any rules and regulations under this Section 23.0, unless any such rules and regulations have been first approved in writing by the Tenant, acting reasonably.

24.0 LANDLORD’S RIGHT TO PERFORM

24.1 If the Tenant fails to perform any of the covenants or obligations of the Tenant under or in respect of this Lease beyond the applicable cure period provided for in this Lease, the Landlord may, upon giving the notice required hereunder to the Tenant, perform or cause to be performed any of such covenants or obligations or any part thereof. For such purpose, the Landlord may do such things as may be requisite and may enter upon the Premises to do such things and all expenses incurred and expenditures made by or on behalf of the Landlord will be paid forthwith by the Tenant to the Landlord. If the Tenant fails to pay the same, the Landlord may add the same to the Rent and recover the same by all remedies available to the Landlord for the recovery of Rent in arrears provided that if the Landlord commences or completes either the performance or the causing to be performed of any of such covenants or obligations or any part thereof, the Landlord will not be obliged to complete such performance of causing to be performed or be later obliged to act in like fashion.

25.0 REMEDIES CUMULATIVE

25.1 No remedy conferred upon or reserved to the Landlord herein by statute or otherwise is considered exclusive of any other remedy but the same is cumulative and is in addition to every other remedy available to the Landlord and all such remedies and powers of the Landlord may be exercised concurrently and from time to time and often as may be expedient by the Landlord.

26.0 LANDLORD’S LIMIT OF LIABILITY

26.1 The term “Landlord” as used in this Lease so far as covenants or obligations on the part of the Landlord are concerned is limited to mean the Landlord as herein before set out, while it retains its interest in the Land and Premises but upon a transfer of that interest, the Landlord is automatically relieved after the date of such transfer of all personal liability arising out of the requirement for performance of any obligations on the part of the Landlord herein contained (except to the extent incurred prior to such transfer), provided that this release from liability will become effective only to the extent the transferee has expressly assumed in writing, subject to the limitations of this Section, all of the terms of this Lease to be performed on the part of the Landlord, it being intended hereby that the obligations contained in this Lease on the part of the Landlord is binding upon the Landlord, its successors and assigns, only during and in respect of the respective successive periods of their interest in the Land and Premises.

27.0 LETTER OF CREDIT

27.1 The Tenant shall, on or before the commencement of the Term, deliver to the Landlord an irrevocable unconditional letter of credit issued by a Canadian chartered bank payable to the Landlord in an amount of $1,000,000. The letter of credit shall be renewed by the Tenant during the first 5 years of the Term of the Lease in order to secure the Landlord against default of any obligations by the Tenant under this Lease. The amount of the letter of credit will decline as follows: Year 1 – 100% of amount above; Year 2 – 100% of amount above; Year 3 – 75% of amount above; Year 4 – 75% of amount above; and Year 5 – 25% of amount above. If the Tenant is in default of any of its obligations hereunder beyond the applicable cure period set out in this Lease during the first 5 years of the Term, the Landlord shall be entitled to make partial draws under the letter of credit provided that in the case of an non monetary default the Landlord has first provided the Tenant with 15 days written notice of its intention to do so and to apply the proceeds thereof to any Rent then due or in respect of any costs, expenses or losses incurred by the Landlord in respect of any default by the Tenant under this Lease. If any partial draw-down is made during the first 5 years, the Tenant shall, within 15 days thereafter, restore the letter of credit to the full amount required during the year such default was made as set out above, failing which the Landlord may convert the entire letter of credit to cash to be applied on account of Rent or to the Landlord’s damages arising from the Tenant’s default hereunder.

28.0 WHOLE OF AGREEMENT

28.1 The Tenant agrees that the Premises are leased by the Tenant without any representations or warranties other than as contained in this Lease and Offer to Lease and that no representative or Agent of the Landlord is or is authorized or permitted to make any representations with reference hereto or to vary or modify this Lease in any way, except in writing under seal, and that this Lease contains all of the agreements and conditions made between the parties hereto. The Offer to Lease shall survive execution of this Lease, provided that where this Lease expressly contradicts the Offer to Lease, this Lease shall govern.

29.0 USE OF COMMON AREAS/PARKING

29.1 With respect to the Common Areas and parking:

(a) The Landlord grants to the Tenant for the Term as an appurtenant part of this Lease, for use by the Tenant and its agents, invitees, servants, employees, licensees and customers, in common with the Landlord and its agents, invitees, servants, employees, and licensees, the non-exclusive right and licence to use the Common Areas for the purposes as provided herein and in accordance with good business practice, upon and subject to the covenants and conditions hereinafter expressed and in particular, without limiting the generality of the foregoing, such right, servitude, right-of-way and licence of use hereby granted to the Tenant shall include the right to use the parking areas (including the means of pedestrian and vehicular access and the entrances and exits to and from the Land and Building included therein) for the purposes of pedestrian and vehicular access to and from the Land and Building and the parking of vehicles in parking spaces provided therein; and

(b) the Tenant shall rent from the Landlord all the parking underground and all the parking in the surface parking lot immediately adjacent to the Building being a total of 149 legal stalls at the following rates:

(i) Forty-five ($45.00) Dollars per month per stall for the 27 surface stalls; and

(ii) Sixty ($60.00) Dollars per month per stall for the 122 underground parking stalls for the Term;

Parking rates shall be subject to applicable goods and services taxes, provincial sales tax under the Social Services Tax Act and to annual adjustments during the Term based upon prevailing market rates. The Tenant shall be entitled to park motorcycles and store bicycles in designated areas at no additional charge.

30.0 OPTIONS TO RENEW

30.1 If the Tenant is not then in material default of its covenants under the Lease, the Landlord shall grant to the Tenant upon eight (8) months’ written notice prior to the expiration of the term or the applicable renewal term, as the case may be, two renewal leases each for a term of five (5) years upon the same terms and conditions contained herein, save as to Basic Rent, free rent, Landlord’s (Base Building) Work, Leasehold Improvement Allowance and/or any other inducement granted by the Landlord to the Tenant, plus GST, and as to any option to renew after the second renewal term. Basic Rent for said renewal term shall be agreed upon between the parties and shall be based on the fair market rental for premises of similar size, quality and location, excluding any improvements paid for by the Tenant over and above the Leasehold Improvement Allowance, at time of renewal, but shall not be less than the Basic Rent payable during the last year of the term of this Lease. The Landlord and Tenant shall attempt to agree on the fair market rental for the renewal term during the sixty (60) day period immediately preceding the expiry of the initial term. Failing agreement as to the rental rate, the rate shall be determined by a single arbitrator under the Commercial Arbitration Act of British Columbia.

31.0 LEASEHOLD IMPROVEMENT ALLOWANCE

31.1 For greater certainty, the Leasehold Improvement Allowance of $1,380,000.00 plus GST shall be paid by the Landlord to the Tenant within 15 days of the following being complete:

(a) the Lease having been executed by the Tenant and returned to the Landlord;

(b) the Tenant having submitted to the Landlord bona fide invoices as satisfactory evidence of payment of all of the Tenant’s contractors in full for the Tenant’s Work by the Tenant including, but not limited to, a statutory declaration that all fees and payments resulting from the modification and fixturing of the Premises have been paid;

(c) an occupancy permit and proof of substantial completion of the Tenant’s Work as certified by the Tenant’s consultants in writing have been provided by the Tenant to the Landlord; and

(d) all holdback periods applicable under the *Builders Lien Act* have expired and no builders liens have been filed. This condition under Section 31.1(d) shall apply to ten percent (10%) of the Leasehold Improvement Allowance.

31.2 Any unused portion of the Leasehold Improvement Allowance shall be credited to the Tenant in the form of free rent in addition to other free rent provided herein from the Commencement Date.

32.0 RIGHT OF FIRST OPPORTUNITY (BUILDING 8)

32.1 If the Landlord intends to lease space, except on a renewal of an existing lease, within Building 8 (the “Additional Space”), the Landlord shall deliver written notice (the “Notice”) to the Tenant indicating its intention to lease the Additional Space. The Tenant shall have 5 business days, following delivery of the Notice, to provide a written proposal (the “Tenant’s Proposal”) in respect of the Additional Space including rent, term and inducements to the Landlord. Following receipt of the Tenant’s Proposal, the Landlord shall have 5 business days to accept or reject the Tenant’s Proposal at the Landlord’s sole discretion. If the Landlord accepts the Tenant’s Proposal, a lease for the Additional Space shall be entered into generally in the form of this Lease upon the terms set out in the Tenant’s Proposal. If the Landlord rejects the Tenant’s Proposal, the Landlord shall not lease the Additional Space upon terms and conditions which are determined by the Landlord, acting reasonably, to be less favourable to the Landlord than those set out in the Tenant’s Proposal including a consideration of the covenant/financial standing of the proposed tenant. If the Landlord does not so lease the Additional Space within six (6) months of the original Notice, the terms of this provision shall again apply to any proposed leasing of the Additional Space for a period expiring on the first anniversary of the substantial completion of the Building. If, following delivery of a Notice, the Tenant does not submit a Tenant’s Proposal, the Landlord shall be free to lease the Additional Space upon such terms and conditions as the Landlord shall determine. The Tenant acknowledges that the intent of this right of first opportunity is to provide an opportunity for the Tenant to obtain additional premises proximate to the Premises as the Tenant’s business expands and not to create a commercial opportunity for the Tenant in the real estate market. While any lease of the Additional Space will permit the Tenant to sublet the Additional Space with the prior written consent of the Landlord having been first obtained with such consent not to be unreasonably or arbitrarily withheld or delayed the lease shall contain the following limitations with respect to any sublease of the Additional Space:

(a) the Tenant is not allowed to profit on any subletting and shall be prohibited from subletting any of the Additional Space on financial terms more favorable to the Tenant than the Tenant’s financial obligations to the Landlord set out in the lease for the Additional Space;

(b) to the extent there are revenues or other monetary benefits to the Tenant arising out of any sublease of any Additional Space in excess of the monetary obligations of the Tenant to the Landlord then the benefits whether by way of increased rent or otherwise shall be for the sole account of the Landlord;

(c) for the purposes of subsections (a) and (b), any increased rent or other benefits obtained by the Tenant in any sublease of the Additional Space from any subtenant arising solely from any benefit to the subtenant from any leasehold or other improvements installed or constructed by the Tenant in the sublease premises at the cost and expense of the Tenant over and above any leasehold improvement or similar allowance provided to the Tenant by the Landlord in any lease for the Additional Space, shall not be deemed to be profit, revenue or other monetary benefit to the Tenant for which the Tenant must account to the Landlord;

(d) the Landlord shall not be obligated to pay any inducement, leasehold improvement allowance or provide any other benefit provided to the Tenant in any lease for the Additional Space to any subtenant;

(e) the Tenant, despite any sublease, shall not be released in any manner from any covenant to be observed or performed by the Tenant in any lease for the Additional Space; and

(f) in any advertising or other promotion of any sublease premises in the Additional Space the Tenant and any agent or broker on behalf of the Tenant shall not print, publish, post, display or broadcast including in any electronic format any reference to the lease rate being offered by the Tenant for sublease premises in the Additional Space.

33.0 NOTICES

33.1 Any notice required or contemplated by any provision of this Lease or which the Landlord or Tenant may desire to give to the other is sufficiently given by personal delivery or by registered letter, postage prepaid and mailed in one of the Canada Post Offices in the City of Vancouver, British Columbia, and addressed to the party to whom such notice is to be given at the address of such party as given in this Lease or at such other address as either party may notify the other of in writing during the Term, if to the Tenant, addressed to the Premises and any such notice is effective as of the day of such personal delivery or as of the day four days following the date of such posting as the case may be.

34.0 INTERPRETATION

34.1 This Indenture is construed in accordance with laws of British Columbia.

34.2 Where required the singular number is deemed to include the plural and the neuter gender the masculine or feminine and the captions herein are for convenience only and will not constitute a part of this Lease.

34.3 The definition of any words used in any Section of this lease will apply to such words when used in any other Section hereof whenever the context is consistent.

34.4 In case of more than one Tenant, the said grants, covenants, conditions, provisos, agreements, rights, powers, privilege and liabilities is construed and held to be several as well as joint.

34.5 THIS INDENTURE will enure to the benefit of and be binding upon the parties hereto and their respective heirs, executors, administrators, successors and permitted assigns.

IN WITNESS WHEREOF each of the parties hereto has affixed its hand or corporate seal to these presents on the day and year first above written.

THIS LEASE is not valid unless countersigned by the Landlord.

THE COMMON SEAL of DISCOVERY PARKS INCORPORATED was hereunto affixed in the presence of:

/s/ Authorized Signatory
Authorized Signatory

C/S

/s/ Authorized Signatory
Authorized Signatory

THE COMMON SEAL of XENON GENETICS INC. was hereunto affixed in the presence of:

/s/ Authorized Signatory
Authorized Signatory

C/S

/s/ Authorized Signatory
Authorized Signatory

LEASE SURVEYS

@

3650 GILMORE WAY, BURNABY

(ACCORDING TO BOMA STANDARDS)

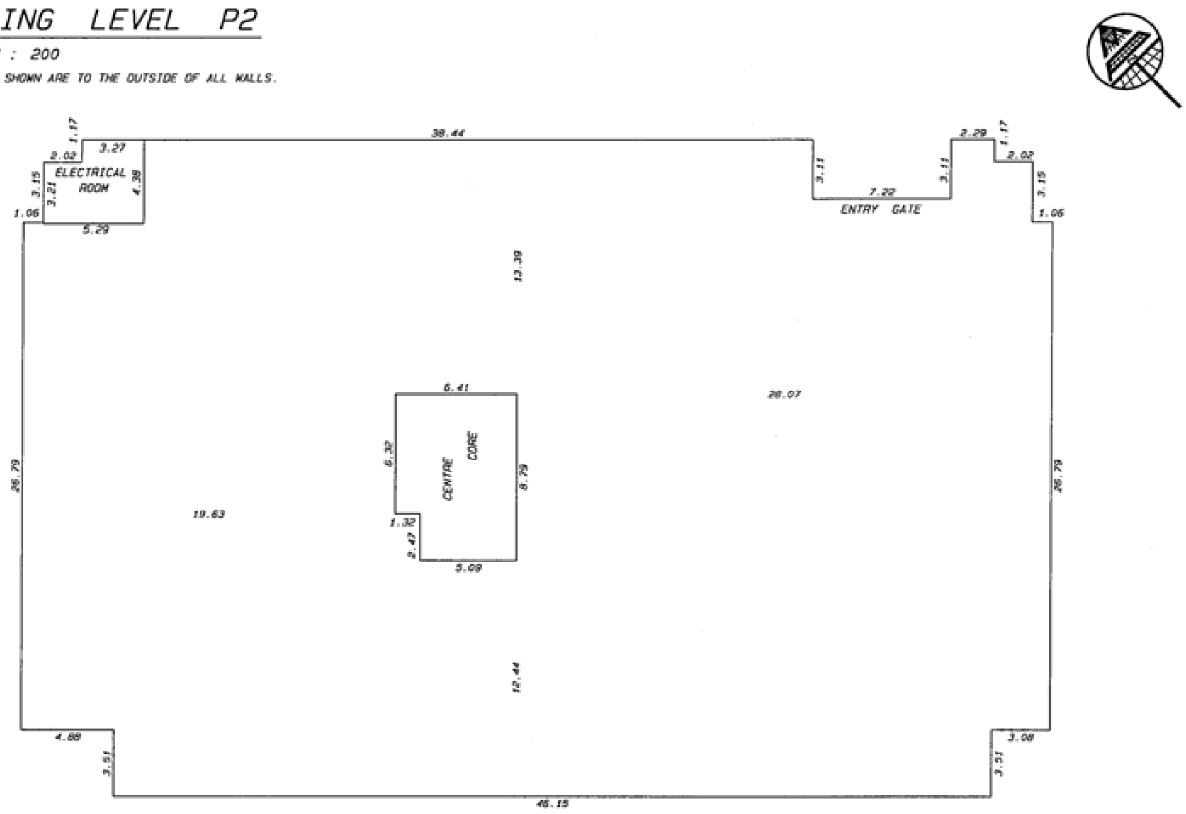
MATSON PECK AND TOPLISS
SURVEYORS AND ENGINEERS
210 - 8171 Cook Road
Richmond, B.C.
V6Y 3T8
Ph: 270-9331
Fax: 270-4137
CAD File : 12999-L. FIN

DATE: JAN. 26, 2001

PARKING LEVEL P2

SCALE 1 : 200

DIMENSIONS SHOWN ARE TO THE OUTSIDE OF ALL WALLS.



MATSON, PECK & TOPLISS

JOB NO. B00 - 12999

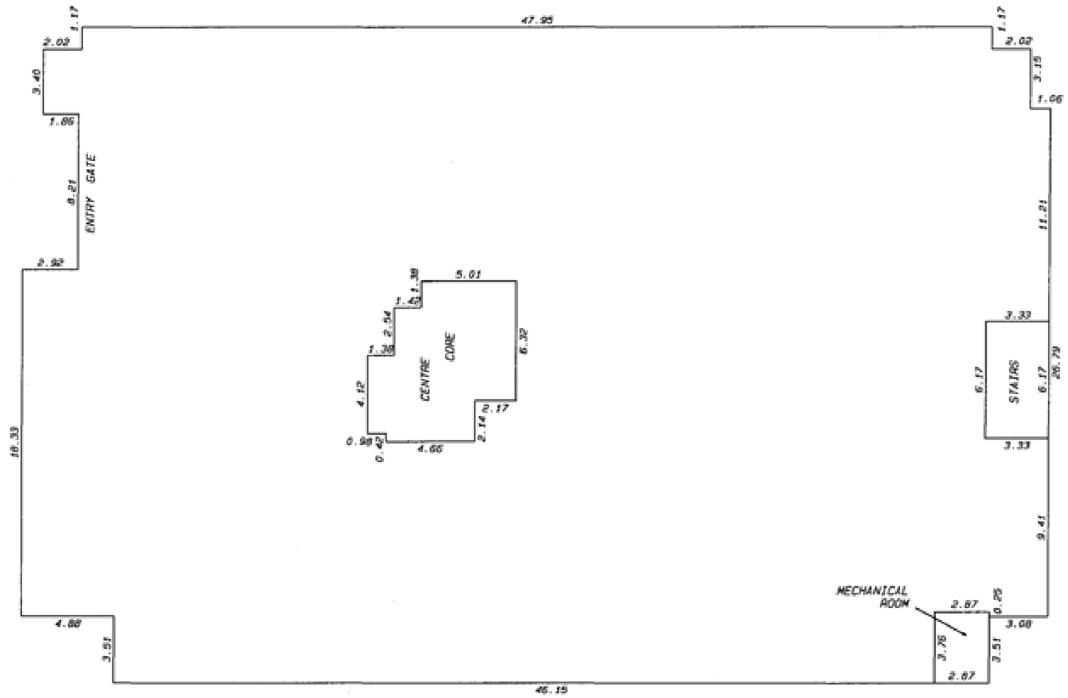
CADFILE: 12999-L.FIN

ELECTRICAL ROOM	20.8 m^2	(224 sq.ft.)
CENTRE CORE	53.1 m^2	(572 sq.ft.)
TOTAL =	73.9 m^2	(796 sq.ft.)

PARKING LEVEL P1

SCALE 1 : 200

DIMENSIONS SHOWN ARE TO THE OUTSIDE OF ALL WALLS.



MATSON, PECK & TOPLISS

JOB NO. 800 - 12999

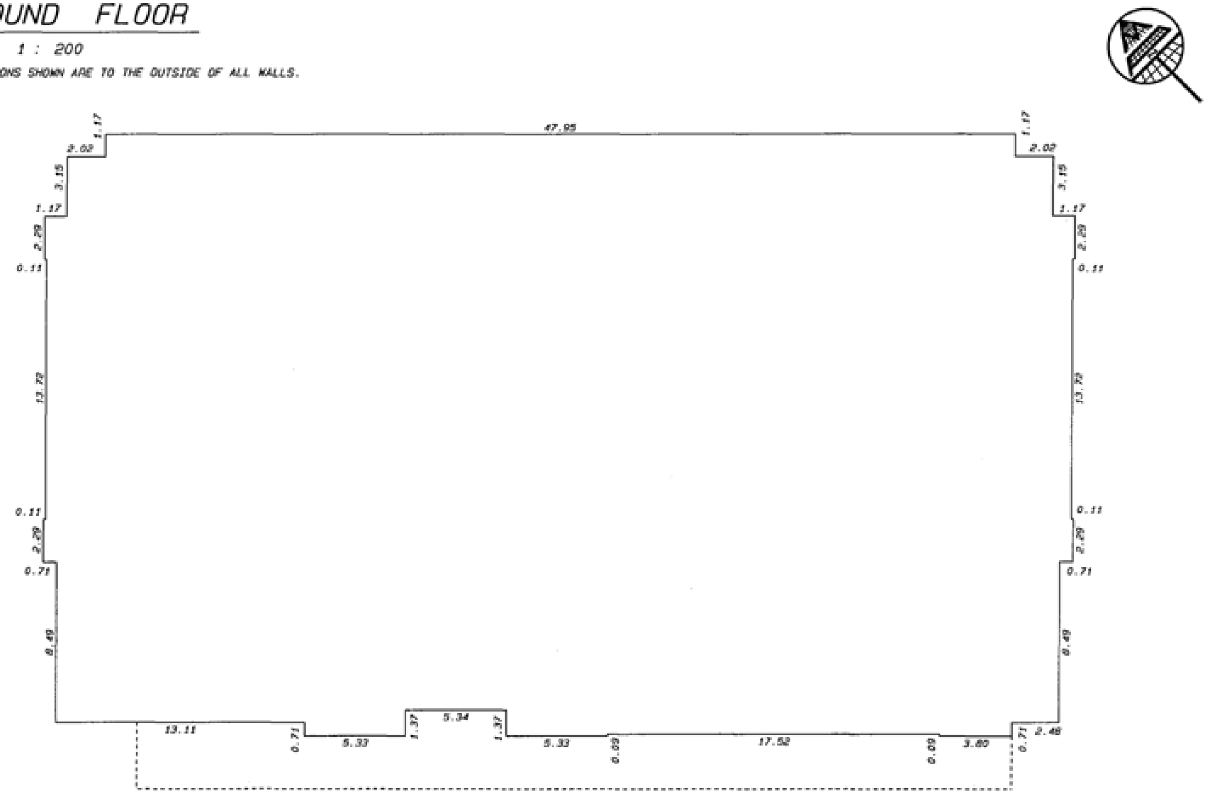
CADFILE: 12999-L.100

CENTRE CORE	53.7 m^2 (578 sq.ft.)
STAIRS	20.5 m^2 (221 sq.ft.)
MECHANCIAL ROOM	10.8 m^2 (116 sq.ft.)
TOTAL	85.0 m^2 (915 sq.ft.)

GROUND FLOOR

SCALE 1 : 200

DIMENSIONS SHOWN ARE TO THE OUTSIDE OF ALL WALLS.



MATSON, PECK & TOPLISS

JOB NO. 800 - 12999

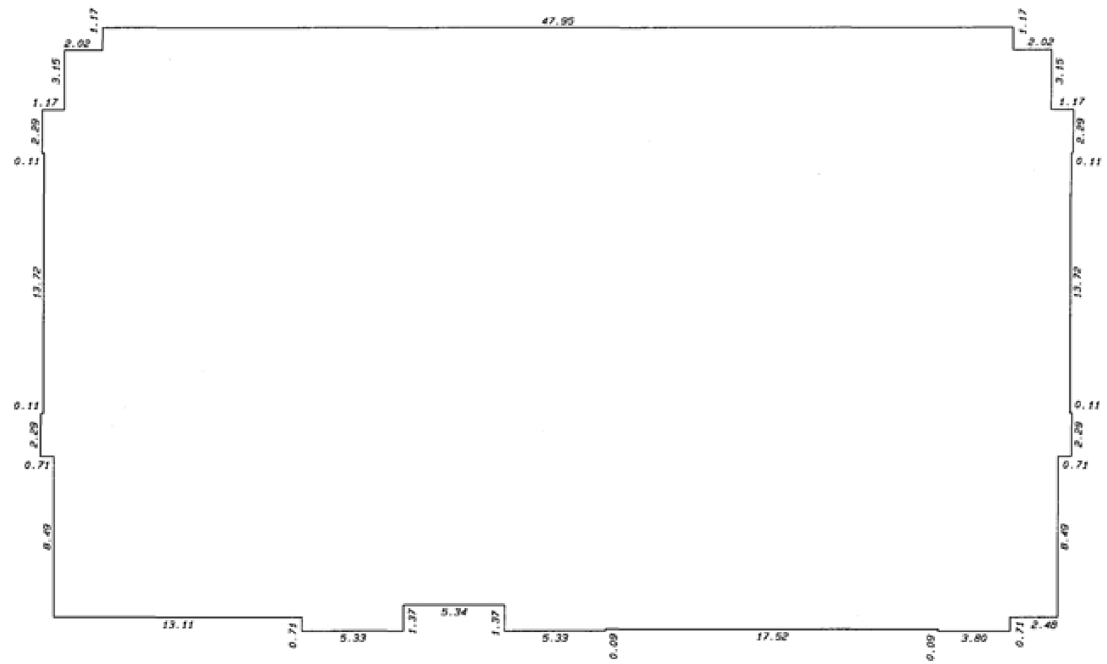
CADFILE: 12999-L.100

GROUND FLOOR AREA 1677.9 m^2 (18061 sq.ft.)

SECOND FLOOR

SCALE 1 : 200

DIMENSIONS SHOWN ARE TO THE OUTSIDE OF ALL WALLS.



MATSON, PECK & TOPLISS

JOB NO. 800 - 12999

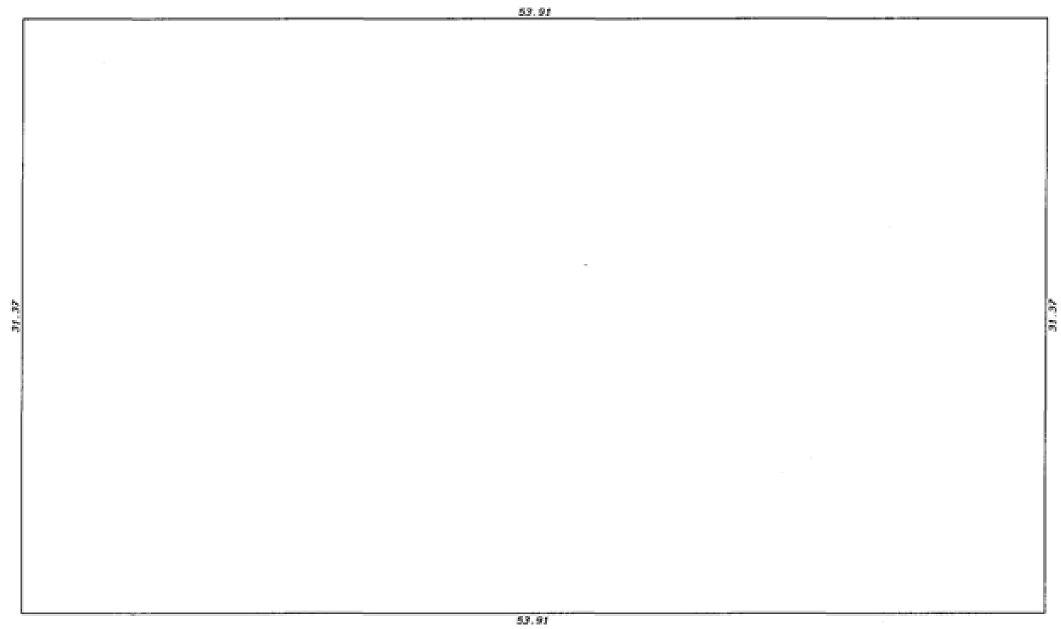
CADFILE: 12999-L.100

SECOND FLOOR AREA 1677.9 m^2 (18061 sq.ft.)

THIRD FLOOR

SCALE 1 : 200

DIMENSIONS SHOWN ARE TO THE OUTSIDE OF ALL WALLS.



MATSON, PECK & TOPLISS

JOB NO. 800 - 12999

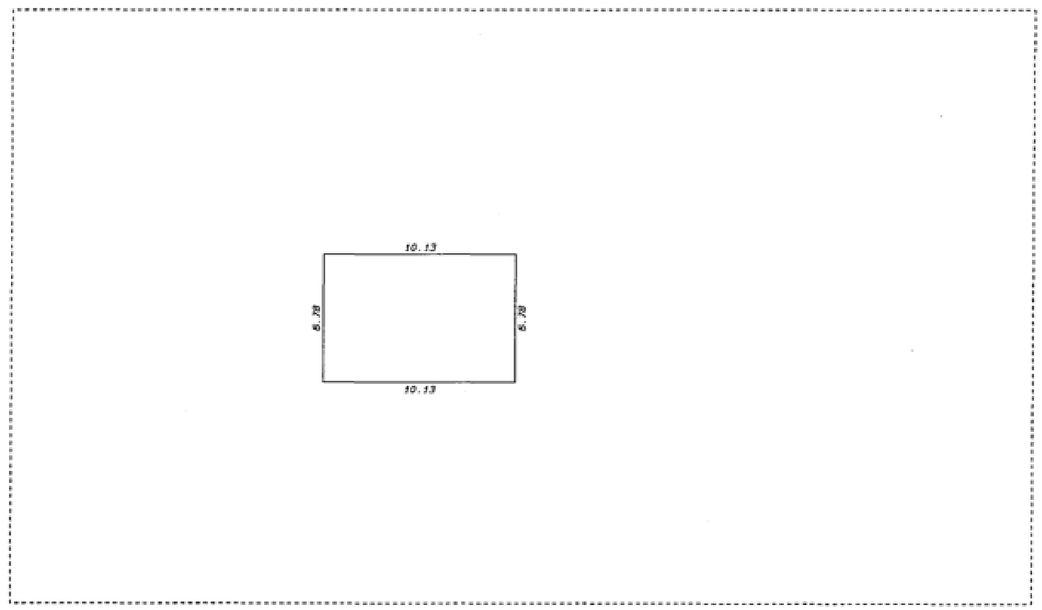
CADFILE: 12999-L.100

THIRD FLOOR AREA 1691.2 m^2 (18204 sq.ft.)

ROOF

SCALE 1 : 200

DIMENSIONS SHOWN ARE TO THE OUTSIDE OF ALL WALLS.



PENTHOUSE ROOF AREA 68.7 m^2 (739 sq.ft.)

MATSON, PECK & TOPLISS

JOB NO. 800 - 12999

CADFILE: 12999-L.100

3650 GILMORE WAY, BURNABY - BUILDING 10

FLOOR	AREA - SQUARE METRES	AREA - SQUARE FEET
P2	**73.9**	**796**
P1	**85.0**	**915**
GROUND	**1677.9**	**18061**
SECOND	**1677.9**	**18061**
THIRD	**1691.2**	**18204**
ROOF	**68.7**	**739**
TOTAL	**5274.6**	**56776**

MATSON PECK AND TOPLISS
SURVEYORS AND ENGINEERS
210 - 8171 Cook Road
Richmond, B.C.
V6Y 3T8
Ph: 270-9331
Fax: 270-4137

LEASE EXTENSION AND MODIFICATION AGREEMENT

THIS AGREEMENT made effective the **8th day of November, 2010**.

BETWEEN:

CONCERT REAL ESTATE CORPORATION

(the "Landlord")

AND:

XENON PHARMACEUTICALS INC.

(the "Tenant")

WHEREAS:

A. By a lease made in 2001 (the "Lease") between Discovery Parks Incorporated (the "Original Landlord") and Xenon Genetics Inc. (the "Original Tenant"), the Original Tenant leased certain premises (the "Premises") on the property known as **3650 Gilmore Way, Burnaby, British Columbia**, as more particularly described in the Lease, for a term of ten (10) years expiring on April 14, 2011;

B. The Landlord is the successor in interest to the Original Landlord;

C. The Tenant is the successor in interest to the Original Tenant;

D. The Landlord and the Tenant acknowledge and agree that the recitals hereto are true and incontrovertible;

E. The Landlord and the Tenant have agreed to extend the term of the Lease and to amend the Lease in the manner set out herein.

THEREFORE in consideration of the premises, the mutual covenants and agreements contained herein and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by each of the parties hereto, the parties agree as follows:

1. For the purposes of this Agreement and unless there is a definition specifically herein contained, any words, terms or phrases that are defined in the Lease shall have the same meaning herein.

2. The Landlord hereby leases the Premises to the Tenant for a further term of **Four (4) Months and Sixteen (16) Days** (the "Extended Term") commencing on **April 15, 2011** and terminating on **August 31, 2011**, on and subject to the terms of the Lease, except as amended herein.

3. For the Extended Term, the Basic Rent will be as follows on the first day of each and every calendar month:

Extended Term	Basic Rent Per Square Foot Per Annum	Monthly Installments
From April 15, 2011 up to and including August 31, 2011	$ 19.50	$92,261.00

For greater certainty, the Tenant shall also pay all Additional Rent as required, in accordance with the Lease throughout the Extended Term.

4. Save and except for any of the Landlord's obligations to maintain and repair the Premises, as set out in the Lease, the Tenant acknowledges that the Landlord is leasing the Premises to the Tenant on an "as is" basis, that the Landlord has no obligation to make or carry out any improvements, alterations or other work to prepare the Premises for occupancy by the Tenant and that the Landlord has no obligation to provide any tenant improvement allowance, free rent or other inducement to the Tenant or otherwise with respect to the extension of the term of the Lease provided for in this Agreement.

5. The Landlord and the Tenant agree that the **Fixturing Period** clause and the **Leasehold Improvement Allowance** in **Sections 10.0 and 31.0** of the Lease have been completed and satisfied and shall not apply to the Extended Term.

6. The parties confirm and ratify the terms and conditions contained in the Lease as amended by this Agreement.

7. This Agreement will, from the date of this Agreement, be read and construed together with the Lease, and this Agreement, as amended hereby, shall continue in full force and effect for the remainder of the term of the Lease in accordance with the terms thereof and hereof.

8. This Agreement will enure to the benefit of and be binding upon the heirs, executors, administrators, successors and permitted assigns of the parties.

9. This Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original, but all of which together shall constitute one and the same document.

10. This Agreement may be executed by the parties and transmitted by facsimile and if so executed and transmitted, this Agreement shall be for all purposes as effective as if the parties had delivered an executed original Agreement.

11. The Landlord and the Tenant confirm that the Landlord is currently not holding any security deposits for the Premises.

IN WITNESS WHEREOF the parties have executed this Agreement as of the date first above written.

CONCERT REAL ESTATE CORPORATION

By: /s/ Authorized Signatory
Name:
Title:

By: /s/ Authorized Signatory
Name:
Title:

XENON PHARMACEUTICALS INC.

By: /s/ Simon Pimstone
Name: Simon Pimstone
Title: President & CEO

By: /s/ Authorized Signatory
Name:
Title:

LEASE EXTENSION AND MODIFICATION AGREEMENT

THIS AGREEMENT made effective the **7th day of February, 2011**.

BETWEEN:

CONCERT REAL ESTATE CORPORATION

(the "Landlord")

AND:

XENON PHARMACEUTICALS INC.

(the "Tenant")

WHEREAS:

A. By a lease made in 2001 (the "Original Lease") between Discovery Parks Incorporated (the "Original Landlord") and Xenon Genetics Inc. (the "Original Tenant"), the Original Tenant leased certain premises (the "Premises") on the property known as **3650 Gilmore Way, Burnaby, British Columbia**, as more particularly described in the Original Lease, for a term of ten (10) years expiring on April 14, 2011;

B. The Landlord is the successor In interest to the Original Landlord;

C. The Tenant is the successor in interest to the Original Tenant;

D. By a lease extension and modification agreement made effective November 8, 2010 (the "Modification") between the Landlord and the Tenant, the Landlord and the Tenant agreed to extend the term of the Original Lease for an additional four (4) months and sixteen (16) days, for a term expiring on August 31, 2011, as further described in the Modification (the Original Lease as modified by the Modification is referred to herein as the "Lease");

E. The Landlord and the Tenant acknowledge and agree that the recitals hereto are true and incontrovertible;

F. The Landlord and the Tenant have agreed to extend the term of the Lease and to amend the Lease in the manner set out herein.

THEREFORE in consideration of the premises, the mutual covenants and agreements contained herein and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by each of the parties hereto, the parties agree as follows:

1. For the purposes of this Agreement and unless there is a definition specifically herein contained, any words, terms or phrases that are defined in the Lease shall have the same meaning herein.

2. The Landlord hereby leases the Premises to the Tenant for a further term of **Four (4) Months** (the "Second Extended Term") commencing on **September 1, 2011** and terminating on **December 31, 2011**, on and subject to the terms of the Lease, except as amended herein.

3. For the Second Extended Term, the Basic Rent will be as follows on the first day of each and every calendar month:

Second Extended Term	Basic Rent Per Square Foot Per Annum	Monthly Installments
From September 1, 2011 up to and including December 31, 2011	$ 19.50	$92,261.00

For greater certainty, the Tenant shall also pay all Additional Rent as required, in accordance with the Lease throughout the Second Extended Term.

4. Save and except for any of the Landlord's obligations to maintain and repair the Premises, as set out in the Lease, the Tenant acknowledges that the Landlord is leasing the Premises to the Tenant on an "as is" basis, that the Landlord has no obligation to make or carry out any improvements, alterations or other work to prepare the Premises for occupancy by the Tenant and that the Landlord has no obligation to provide any tenant improvement allowance, free rent or other inducement to the Tenant or otherwise with respect to the extension of the term of the Lease provided for in this Agreement.

5. The parties confirm and ratify the terms and conditions contained in the Lease as amended by this Agreement

6. This Agreement will, from the date of this Agreement, be read and construed together with the Lease, and this Agreement, as amended hereby, shall continue in full force and effect for the remainder of the term of the Lease in accordance with the terms thereof and hereof.

7. This Agreement will enure to the benefit of and be binding upon the heirs, executors, administrators, successors and permitted assigns of the parties.

8. This Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original, but all of which together shall constitute one and the same document.

9. This Agreement may be executed by the parties and transmitted by facsimile and if so executed and transmitted, this Agreement shall be for all purposes as effective as if the parties had delivered an executed original Agreement.

10. The Landlord and the Tenant confirm that the Landlord is currently not holding any security deposits for the Premises.

IN WITNESS WHEREOF the parties have executed this Agreement as of the date first above written.

CONCERT REAL ESTATE CORPORATION

By: /s/ Authorized Signatory
Name:
Title:

By: /s/ Authorized Signatory
Name:
Title:

XENON PHARMACEUTICALS INC.

By: /s/ Karen Corraini
Name: Karen Corraini
Title: General Counsel & Corporate Secretary

By: ____________________
Name:
Title:

LEASE EXTENSION AND MODIFICATION AGREEMENT

THIS AGREEMENT made effective the **1st day of June, 2011**.

BETWEEN:

CONCERT REAL ESTATE CORPORATION

(the “Landlord”)

AND:

XENON PHARMACEUTICALS INC.

(the “Tenant”)

WHEREAS:

A. By a lease made in 2001 (the “Original Lease”) between Discovery Parks Incorporated (the “Original Landlord”) and Xenon Genetics Inc. (the “Original Tenant”), the Original Tenant leased certain premises (the “Premises”) on the property known as **3650 Gilmore Way, Burnaby, British Columbia**, as more particularly described in the Original Lease, for a term of ten (10) years expiring on April 14, 2011;

B. The Landlord is the successor in interest to the Original Landlord;

C. The Tenant is the successor in interest to the Original Tenant;

D. By a lease extension and modification agreement made effective November 8, 2010 (the “First Modification”) between the Landlord and the Tenant, the Landlord and the Tenant agreed to extend the term of the Original Lease for an additional four (4) months and sixteen (16) days, for a term expiring on August 31, 2011, as further described in the First Modification;

E. By a lease extension and modification agreement made effective February 7, 2011 (the “Second Modification”) between the Landlord and the Tenant, the Landlord and the Tenant agreed to extend the term of the Original Lease for an additional four (4) months, for a term expiring on December 31, 2011, as further described in the Second Modification (the Original Lease as modified by the First Modification and the Second Modification is referred to herein as the “Lease”);

F. The Landlord and the Tenant acknowledge and agree that the recitals hereto are true and incontrovertible;

The Landlord and the Tenant have agreed to extend the term of the Lease and to amend the Lease in the manner set out herein.

THEREFORE in consideration of the premises, the mutual covenants and agreements contained herein and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by each of the parties hereto, the parties agree as follows:

1. For the purposes of this Agreement and unless there is a definition specifically herein contained, any words, terms or phrases that are defined in the Lease shall have the same meaning herein.

2. The Landlord hereby leases the Premises to the Tenant for a further term of **Three (3) Months** (the "Third Extended Term") commencing on **January 1, 2012** and terminating on **March 31, 2012**, on and subject to the terms of the Lease, except as amended herein.

3. For the Third Extended Term, the Basic Rent will be as follows on the first day of each and every calendar month:

Third Extended Term	**Basic Rent Per Square Foot Per Annum**	**Monthly Installments**
From January 1, 2012 up to and including March 31, 2012	$ 19.50	$92,261.00

For greater certainty, the Tenant shall also pay all Additional Rent as required, in accordance with the Lease throughout the Third Extended Term.

4. Save and except for any of the Landlord's obligations to maintain and repair the Premises, as set out in the Lease, the Tenant acknowledges that the Landlord is leasing the Premises to the Tenant on an "as is" basis, that the Landlord has no obligation to make or carry out any improvements, alterations or other work to prepare the Premises for occupancy by the Tenant and that the Landlord has no obligation to provide any tenant improvement allowance, free rent or other inducement to the Tenant or otherwise with respect to the extension of the term of the Lease provided for in this Agreement.

5. The parties confirm and ratify the terms and conditions contained in the Lease as amended by this Agreement.

6. This Agreement will, from the date of this Agreement, be read and construed together with the Lease, and this Agreement, as amended hereby, shall continue in full force and effect for the remainder of the term of the Lease in accordance with the terms thereof and hereof.

7. This Agreement will enure to the benefit of and be binding upon the heirs, executors, administrators, successors and permitted assigns of the parties.

8. This Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original, but all of which together shall constitute one and the same document.

9. This Agreement may be executed by the parties and transmitted by facsimile and if so executed and transmitted, this Agreement shall be for all purposes as effective as if parties had delivered an executed original Agreement.

10. The Landlord and the Tenant confirm that the Landlord is currently not holding y security deposits for the Premises.

IN WITNESS WHEREOF the parties have executed this Agreement as of the e first above written.

CONCERT REAL ESTATE CORPORATION

By: /s/ Authorized Signatory
Authorized Signatory

By: /s/ Authorized Signatory
Authorized Signatory

XENON PHARMACEUTICALS INC.

By: /s/ Tarek S. Mansour
Authorized Signatory

By: /s/ Authorized Signatory
Authorized Signatory

END OF DOCUMENT

3650 GILMORE WAY
BURNABY, BC (BUILDING)

OFFER TO LEASE

BETWEEN

CONCERT REALTY SERVICES LTD. ON BEHALF OF,

CONCERT REAL ESTATE CORPORATION

(LANDLORD)

AND

XENON PHARMACEUTICALS INC.

(TENANT)

Colliers Macaulay NicoIls Inc. (Agent)

Norm Taylor (604) 661-0893 and Ray Ahrens (604) 662-2632

Corporate Representation Group

OFFER TO LEASE

3650 GILMORE WAY
BURNABY, BC

(“BUILDING”)

TO:	CONCERT REALTY SERVICES LTD., ON BEHALF OF CONCERT REAL ESTATE CORPORATION 9th Floor, 1190 Hornby Street Vancouver, BC V6Z 2K5	**hereinafter called the (“Landlord”)**
WE:	XENON PHARMACEUTICALS INC. 3650 Gilmore Way Burnaby, BC V5G 4W8	**hereinafter called the (“Tenant”)**

The Tenant hereby offers to lease from the Landlord, through Colliers Macaulay NicolIs Inc., (“Agent”), in consideration of the rents, covenants and agreements contained in this offer to lease (the “Offer”), the Leased Premises (hereinafter defined) upon the following terms and conditions:

1. LEASED PREMISES

The premises (the “Leased Premises”) shall be those premises in the Building having a Rentable Area of approximately thirty-four thousand **(34,000) square feet**, being the entire ground (1st) and second (2nd) floors, to be adjusted for the area required by the Landlord to create an entrance lobby and upon conversion to a multi-tenant building.

The actual Rentable Area of the Leased Premises, including any Additional Area, shall be measured by the Landlord’s professional surveyor in accordance with the Lease and ANSI/BOMA Z65.1-1996 standards within thirty (30) days of the Commencement Date.

2. TERM

The term term (the “Term”) of the Lease shall be one hundred twenty **(120) months**, **commencing on the 1st day of September 2011** (the “Commencement Date”) and expiring on the 31st day of August, 2021 (the “Expiration Date”), subject to the terms of the Lease.

3. BASIC RENT

The Basic Rent shall be payable by the Tenant to the Landlord in advance on the first day of each month during the Term, based on the Rentable Area of the Leased Premises. The Basic Rent, in dollars per rentable square foot per annum, shall be:

Years one (1) through five (5)	**—**	**$19.50**
Remainder of Term	**—**	**$21.00**

The Tenant shall have a Free Basic Rent period being September 1, 2011 through to January 15, 2012. During this period, the Tenant shall pay to the Landlord its Proportionate Share of Operating Costs and Property Taxes and abide by all other terms of the Lease.

4. OPERATING COSTS AND PROPERTY TAXES

In addition to Basic Rent, the Tenant shall be responsible for paying its proportionate share of operating expenses and property taxes, on a monthly basis, in advance on the first day of each month (the "Operating Costs and Property Taxes" to be defined in the Lease), which shall include all actual and reasonable costs incurred by the Landlord in operating, servicing, maintaining, insuring, repairing and managing the Leased Premises. The Operating Costs and Property Taxes are estimated at Seven Dollars and Thirty-Five Cents ($7.35) per square foot of Rentable Area for the fiscal year of the Building ending September 30, 2010.

The Landlord shall arrange and be financially responsible for all installation costs for separate metering of all utilities supplied to the Tenant, pursuant to the Lease. This may be by way of a sub-meter and include third-party monitoring which shall form part of the Tenant's Operating Costs.

5. DEPOSIT

The Landlord and the Tenant acknowledge and agree that the Landlord is currently not holding any security deposit for the Premises.

Upon the conditional mutual acceptance of this Offer, the Tenant shall submit a deposit cheque to Colliers International, in trust, in the amount of **$89,964.00**, which will be held by the Landlord as security deposit without interest, as further described in the Lease.

6. LEASE

The Lease shall be in the form of the existing Lease, allowing for reasonable amendments thereto as requested by the Landlord and Tenant. The final form of Lease, including the terms and conditions of this Offer and all agreed amendments thereto shall be delivered by the Landlord to the Tenant within ten (10) business days after unconditional acceptance of this Offer. The Lease shall be executed and delivered by the Tenant to the Landlord within five (5) business days of receipt by the Tenant.

7. LANDLORD'S WORK

The Leased Premises shall be accepted by the Tenant on an "as is" basis with the exception of the Landlord's Work outlined on **Schedule "B"** attached hereto. The Landlord's work shall be completed by the Landlord as close to the Commencement Date as feasible and to the building standard. The Tenant acknowledges and agrees that if Landlord's Work is required, some of this Landlord's Work may have to be done after the Tenant vacates the third (3rd) floor of the Building.

The Tenant acknowledges and agrees that during such time when the Landlord, or its appointed contractors, sub-contractors, or employees is/are conducting the Landlord's Work in the Building, the Tenant will be in the Leased Premises in common with the Landlord, its contractors, sub-contractors, or employees. The Landlord will make reasonable efforts to ensure that the operation of the Tenant's business is not disrupted during the Landlord's Work period; however, the Tenant acknowledges and agrees that during the Landlord's

Work period, there will be disruptions throughout the Tenant's business hours (or after business hours) and the Tenant shall make its best commercial efforts to co-operate with the Landlord, its appointed contractors, sub-contractors, or employees during the Landlord's Work period to ensure that the Landlord's Work proceeds efficiently.

8. LEASEHOLD IMPROVEMENT ALLOWANCE

The Landlord will pay to the Tenant as a contribution towards the cost of the Tenant's leasehold improvements (the "Tenant's Work"), **Twenty-five Dollars ($25.00) per square foot** of Rentable Area of the Leased Premises (plus applicable taxes) (the "Allowance"). This Allowance shall be payable upon the completion of the items listed hereto in Schedule "C", which shall be incorporated into the Landlord's standard Tenant Work Agreement forming part of the Lease. Should the Tenant's Work cost less than the Allowance, the difference will be applied in reduction of the Basic Rent and Operating Costs and Property Taxes payments due under the Lease to a maximum of up to Ten Dollars ($10.00) per square foot of Rentable Area of the Leased Premises, plus applicable taxes.

9. CONDITIONS PRECEDENT - TENANT

This Offer and Acceptance is subject to the following Conditions Precedent being waived at the sole discretion of the Tenant:

(a) The Tenant's senior managements' and Board of Directors' unfettered approval of this Offer to Lease by February 28, 2011 or such other time as may be subsequently agreed.

If the Tenant fails to notify the Landlord in writing that the Conditions Precedent have been satisfied or waived within the above noted respective timelines, then this Offer shall become null and void and neither party shall have further obligation to the other. This clause is for the sole benefit of the Tenant.

In consideration of $10.00 non-refundable paid by the Tenant to the Landlord, and other good and valuable consideration (the receipt and sufficiency of which the Landlord acknowledges), the Landlord agrees not to revoke this Offer while it remains subject to the foregoing Tenant's Conditions.

10. FIRST OPPORTUNITY TO LEASE

Provided that the Tenant did not exercise the Option to Expand in Clause 11 of this Offer to Lease and has not been in material breach of the Lease, the Tenant shall have the first opportunity to lease any space becoming available for lease **that is not encumbered by another lease** on the third (3^{rd}) floor of the Building at any time during the Term of the Tenant's Lease. The Basic Rent payable on the said space shall be the current fair market rental as agreed to by the parties, and failing such agreement, as determined by arbitration pursuant to the Commercial Arbitration Act of British Columbia. The Tenant shall have the right to assign this First Opportunity to Lease pursuant to the permitted assignment of all rights under the Lease.

11 OPTION TO EXPAND

Upon providing written notice to the Landlord no later than February 28, 2011, the Tenant shall have the option to lease the entire 3rd floor of the building on the same terms and conditions as the Leased Premises, subject to para 13.

The third (3rd) floor of the Building shall be leased to the Tenant on an "as-is, where-is" basis and the Landlord will not be required to complete the Landlord's Work attached hereto as Schedule "B".

12. OPTION TO RENEW

Provided the Tenant has not been in breach of the Lease, the Tenant shall have the right to extend the Term of the Lease with respect to the Leased Premises and any additional space leased for an additional two (2) consecutive term(s) of five (5) years on the same terms and conditions as contained in the Lease, save only the Basic Rent, any free rent, landlord's work, tenant allowances, or other tenant inducements and this option to renew. To exercise this right, the Tenant shall give written notice to the Landlord no earlier than twelve (12) months and no later than nine (9) months prior to the Expiration Date or the expiry of the immediately preceding extension period (as the case may be), and if such notice is not given, this option to extend shall be deemed waived and of no further effect and any additional extension periods will also be null and void. The Basic Rent payable during each such extension period shall be the fair market rent for the Leased Premises, taking into account the inducements being offered in the market and excluding the value of any improvements that have been constructed at the expense of the Tenant. In any event, the Basic Rent per annum shall not be less than the Basic Rent payable in the last year of the expiring term. In the event that Landlord and Tenant are unable to reach agreement on the Basic Rent, the Basis Rent shall be determined by arbitration pursuant to the Commercial Arbitration Act of British Columbia.

13. RIGHT OF TERMINATION

Provided that the Tenant has not been in material breach of the Lease, the Tenant shall have the right to surrender the Lease on or at any time after the forty-eighth (48th) month of the Term (the "Right to Terminate") by providing a minimum of twelve (12) months prior written notice to the Landlord and, upon providing written notice to cancel the Lease, paying a surrender fee calculated as the unamortized portion of the Allowance, the unamortized portion of real estate commissions paid by the Landlord, and two (2) months gross rent, plus applicable taxes. For the purpose of this calculation, the Allowance and commissions shall be amortized over the Term of the Lease at an effective interest rate of 7% per annum, compounded semi-annually.

Provided that the Tenant has exercised its option to lease the 3rd floor and that the Tenant has not been in material breach of the Lease, the Tenant shall have the right to surrender the 3rd floor on or at any time after the thirty-sixth (36th) month of the Term by providing a minimum of twelve (12) months prior written notice to the Landlord and, upon providing written notice to cancel the Lease, paying a surrender fee calculated as the 3rd floor proportion, based upon rentable area, of the unamortized portion of the Allowance, the unamortized portion of real estate commissions paid by the Landlord, and two (2) months gross rent, plus applicable taxes. For the purpose of this calculation, the Allowance and commissions shall be amortized over the Term of the Lease at an effective interest rate of 7% per annum, compounded semi-annually.

14. PARKING

The Tenant shall be provided surface and underground parking stalls based on its proportionate share and in common with other tenants in the Building (if any) on a first-come, first-served basis (random stalls), free of any monthly parking charge for the Term of the Lease and any renewals thereof. The Tenant may designate underground parking spaces allocated to it for use as storage areas or other uses and may fence these off or construct demising walls, subject to the Landlord's approval and compliance with building codes, and subject to not impeding access to the balance of the parking stalls. The Tenant covenants that all fencing or demised walls for such storage areas shall be removed at the Tenant's sole cost and expense prior to Lease expiry and all damages caused by such removal shall be repaired by the Tenant at its sole cost and expense.

15. RESTORATION

Upon surrender of all or a part of the third (3rd) floor, in the event that the Landlord elects to require the Tenant to demolish improvements to pare 8.4 of the current lease, the Tenant shall not be responsible for any costs associated with construction of corridors, demising walls and the modifications to the Building's mechanical and electrical systems (subject to Clause 4 of this Offer) for converting the floor for multi-tenant use in compliance with building codes. The Tenant shall similarly not be responsible for any costs associated with converting the main floor lobby or other portions of the Building for multi-tenant purposes.

Upon expiry of the Term of the Lease (as extended by this Offer) of the 1st and 2nd floor Leased Premises, or any permitted renewal/cancellation thereof, the Tenant shall only be responsible for removing any leasehold improvements or Tenant's Work to a maximum amount of $800,000.00 plus applicable taxes.

16. SIGNAGE

The Tenant shall be granted non-exclusive signage on the Building, subject to the terms and conditions in the Lease, all existing exterior signage shall remain in place during the Term of the Lease and any extension thereto, and signage shall remain exclusive to the Tenant until such time as the Tenant surrenders the 3rd floor.

17. USE

The Leased Premises shall be used for the purpose of general business office, the development, research and production of pharmaceuticals, the operation of a vivarium and any other use permitted under the applicable zoning by-laws for the Building.

The Landlord has made no representation or warranty to the Tenant concerning any aspect of the Building or the Premises and ,the Tenant is solely responsible for satisfying itself concerning the suitability of the Premises for their intended use by the Tenant, the applicable zoning and use restriction by-laws, and availability of permits.

18. SOLE AGREEMENT

There are no agreements, covenants, representations, warranties or conditions in any way relating to the subject matter of this agreement expressed or implied, collateral or otherwise, except as expressly set forth herein.

19. TAXES

Amounts referred to in this Offer that are quoted without the goods and services tax or harmonized sales taxes such shall be subject to applicable taxes.

20. TIME OF THE ESSENCE

Time is of the essence of this agreement with respect to the covenants contained herein.

21. DEFINITIONS

Words defined in the Lease and used herein shall have the same meaning ascribed to them by the Lease. This Offer, if accepted, shall constitute a binding agreement between the parties to enter into the Lease and to abide by the terms and conditions contained herein.

22. OFFER PROVISIONS

All provisions of this Offer shall not survive the completion of this transaction. In the event of any conflict between the terms of this Offer and the terms of the Lease, the terms of the Lease shall prevail.

23. DISCLOSURE

The Landlord and the Tenant acknowledge and agree that, In accordance with section 5.10 of the real Estate Services Act, and in accordance with the Code of Ethics of the Canadian Real Estate Association:

(a) Concert Realty Services Ltd. ("Concert") has disclosed that it is working solely on behalf of the Landlord. The Landlord declares that it is solely responsible for any remuneration payable to Concert.

(b) Colliers Macaulay Nicolls Inc. (the "Agent') has disclosed that it is representing only the Tenant in the transaction described in this Agreement;

(c) the Agent, In order to accommodate the transaction described in this Agreement, was and is entitled to pass any relevant information they receive from either party or from any other source to either of the parties as the Agent sees fit, without being in conflict of their duties to either party; and

(d) the Agent's commission, calculated as Six Dollars ($6.00) per square foot of rentable area plus applicable taxes, shall be payable by the Landlord as follows:

Fifty percent (50%) upon fun execution of the Lease; and

Fifty percent (50%) upon the Lease Commencement Date.

24. ACCEPTANCE

This Offer shall be irrevocable and open for acceptance until 4:00 PM on the 25th day of November, 2010, after which time if not accepted this Offer shall be null and void. This Offer may be accepted by signing and returning one duplicate copy or facsimile of this Offer.

DATED this 23rd day of November, 2010.

XENON PHARMACEUTICALS INC.

TENANT

Per: /s/ Simon Pimstone
(Authorized Signatory)

The Landlord hereby accepts the above Offer this 9th day of November, 2010.

CONCERT REALTY SERVICES LTD., ON BEHALF OF
CONCERT REAL ESTATE CORPORATION

LANDLORD

Per: /s/ Authorized Signatory
(Authorized Signatory)

Attachments

1. Deleted
2. Schedule “B”: Landlord’s Work
3. Schedule “C”: Allowance

SCHEDULE "B"

LANDLORD'S WORK

Attached to and forming part of an Offer to Lease by Xenon Pharmaceuticals Inc. to Concert Realty Services Ltd., on behalf of, Concert Real Estate Corporation.

The Landlord will, at its own expense, complete the following work on the Main and Third (3^{rd}) floors of the Building in accordance with Clause 7 of this Offer to Lease, in respect of the common areas of the building, and, to the extent that they are affected, the Leased Premises:

(a) Where required, construct demising walls;

(b) Install double full height glass entrance doors plus full height solid core exit doors complete with magnetic card access system tied into the building security system;

(c) Reconfigure Heating, Ventilation and Air Conditioning (HVAC) ;

(d) Reconfigure automatic sprinkler system;

(e) Reconfigure elevator and entrance lobbies;

(f) Modify the security system to provide the Leased Premises with autonomous security.

(g) Replace any cracked, chipped or stained ceiling acoustic tiles or drywall ceilings with new or like new matching acoustic ceiling tiles and finishes (in common area only);

(h) Where required by building code, the Landlord shall be responsible for seismic upgrades to base building T-bar ceiling, lighting systems and base building mechanical systems.

The Tenant acknowledges and agrees that during such time when the Landlord, or its appointed contractors, sub-contractors, or employees is/are conducting the Landlord's Work in the Building, the Tenant will be in the Leased Premises or the Additional Area in common with the Landlord, its contractors, sub-contractors, or employees. The Landlord will make reasonable efforts to ensure that the, operation of the Tenant's business is not disrupted during the Landlord's Work period; however, the Tenant acknowledges and agrees that during the Landlord's Work period, there will be disruptions throughout the Tenant's business hours (or after business hours) and the Tenant shall make its best commercial efforts to co-operate with the Landlord, its appointed contractors, sub-contractors, or employees during the Landlord's Work period to ensure that the Landlord's Work proceeds efficiently.

SCHEDULE "C"

ALLOWANCE

The Landlord will pay to the Tenant an Allowance in accordance with Clause 8 of this Offer payable within ten (10) days after the completion of all of the following:

(a) execution and delivery of the Lease by the Tenant to the Landlord as well as full compliance by the Tenant with all Tenant obligations of the Lease;

(b) commencement of the Lease in accordance with the Offer;

(c) completion by the Tenant of the Tenant's Work as stipulated in the Lease;

(d) the applicable statutory lien holdback period shall have expired and any liens that may have been filed against the Leased Premises or the property with respect to the work done by or on behalf of the Tenant with respect to the Leased Premises shall have been discharged from title to the property; and

(e) receipt by the Landlord of:

  (i) a copy of the Tenant's final Inspection Permit for the Premises and a copy of the Tenant's business license;

  (ii) a statutory declaration by a principal of the Tenant of payment in full of all costs relating to the work done by the Tenant on the Premises;

  (iii) copies of receipted invoices for the Tenant's Work substantiating the amount that has been expended and paid for by the Tenant;

  (iv) a letter from the Workers' Compensation Board of B.C. confirming that the Tenant and its general contractor have satisfied all assessment requirements of the Board to the date which is thirty (30) days following the date of substantial completion of the Tenant's Work;

  (v) a copy of the certificate of completion signed by the payment certifier in respect of the Tenant's Work; and

  (vi) Certificate of Substantial Completion from the Tenant's contractor.

END OF DOCUMENT

Addendum/Amendment

This addendum/amendment dated for reference **February 7, 2011** shall be attached to and become part of the offer to lease accepted by the Landlord on November 9, 2010 and accepted by the Tenant on November 23, 2010 (the "Offer") between Concert Realty Services Ltd., on behalf of Concert Real Estate Corporation ("Landlord") and Xenon Pharmaceuticals Inc. ("Tenant") for the premises described as **the first (1st) and second (2nd) floor of 3650 Gilmore Way, Burnaby, British Columbia**.

A) The Landlord and the Tenant agree to amend Clause 2 of the Offer as follows:

"2. TERM

The term (the "Term") of the Lease shall be one hundred twenty (120) months, commencing on the **1st day of January, 2012** (the "Commencement Date") and expiring on the 31st day of **December, 2021** (the "Expiration Date"), subject to the terms of the Lease."

B) The Landlord and the Tenant agree to amend the last paragraph of Clause 3 of the Offer as follows:

"The Tenant shall have a Free Basic Rent period being **January 1, 2012** through to **May 15, 2012**. During this period, the Tenant shall pay to the Landlord Its Proportionate Share of Operating Costs and Property Taxes and abide by all other terms of the Lease."

C) The Landlord and the Tenant hereby agree to amend the first paragraph of Clause 7 of the Offer as follows:

"7. LANDLORD'S WORK

The Leased Premises shall be accepted by the Tenant on an "as Is" basis with the exception of the Landlord's Work outlined on Schedule "B" attached hereto. The Landlord's Work shall be completed by the Landlord **at mutually accepted date(s) and time(s) between the Landlord and the Tenant** and to the building standard. The Tenant acknowledges and agrees that If Landlord's Work Is required, some of this Landlord's Work may have to be done after the Tenant vacates the third (3rd) floor of the Building."

D) The Landlord and the Tenant hereby agree to extend the Condition Precedent as outlined In Clause 9 of the Offer as follows:

"9. CONDITIONS PRECEDENT — TENANT

This Offer and Acceptance Is subject to the following Conditions Precedent being waived at the sole discretion of the Tenant:

(a) The Tenant's senior managements' and Board of Directors' unfettered approval of this Offer to Lease by **May 31, 2011** or such other time as may be subsequently agreed.

If the Tenant falls to notify the Landlord in writing that the Conditions Precedent have been satisfied or waived within the above noted respective timelines, then this Offer shall become null and void and neither party shall have further obligation to the other. This clause is for the sole benefit of the Tenant.

In consideration of $10.00 non-refundable paid by the Tenant to the Landlord, and other good and valuable consideration (the receipt and sufficiency of which the Landlord acknowledges), the Landlord agrees not to revoke this Offer while it remains subject to the foregoing Tenant's Conditions."

E) The Landlord and the Tenant hereby agree to extend the Condition Precedent as outlined in Clause 11 of the Offer as follows:

"11. OPTION TO EXPAND

Upon providing written notice to the Landlord no later than **May 31, 2011**, the Tenant shall have the option to lease the entire 3rd floor of the building on the same terms and conditions as the Leased Premises, subject to para 13.

The third (3rd) floor of the Building shall be leased to the Tenant on an "as-is, where-is" basis and the Landlord will not be required to complete the Landlord's Work attached hereto as Schedule "B"."

ALL OTHER TERMS AND CONDITIONS TO REMAIN IN FULL FORCE AND EFFECT

AGREED and ACCEPTED this 14th of February, 2011.

/s/ Authorized Signatory

Concert Realty Services Ltd., on behalf of Concert Real Estate Corporation

AGREED and ACCEPTED this of February, 2011.

/s/ Karen G. Corraini

Xenon Pharmaceuticals Inc.

Addendum/Amendment

This addendum/amendment dated for reference **June 1, 2011** shall be attached to and become part of the offer to lease accepted by the Landlord on November 9, 2010 and accepted by the Tenant on November 23, 2010 and the addendum/amendment dated for reference February 7, 2011 (together, the "Offer") between Concert Realty Services Ltd., on behalf of Concert Real Estate Corporation ("Landlord") and Xenon Pharmaceuticals Inc. ("Tenant") for the premises described as the **first (1st) and second (2nd) floor of 3650 Gilmore Way, Burnaby, British Columbia**.

A) The Landlord and the Tenant agree to amend Clause 2 of the Offer as follows:

Amended From:

"2. TERM

The term (the "Term") of the Lease shall be one hundred twenty (120) months, commencing on the **1st day of January, 2012** (the "Commencement Date") and expiring on the 31st day of **December, 2021** (the "Expiration Date"), subject to the terms of the Lease."

Amended To:

"2. TERM

The term (the "Term") of the Lease shall be one hundred twenty (120) months, commencing on the **1st day of April, 2012** (the "Commencement Date") and expiring on the **31st day of March, 2022** (the "Expiration Date"), subject to the terms of the Lease."

B) The Landlord and the Tenant agree to amend the last paragraph of Clause 3 of the Offer as follows:

Amended From:

"The Tenant shall have a Free Basic Rent period being **January 1, 2012** through to **May 15, 2012**. During this period, the Tenant shall pay to the Landlord its Proportionate Share of Operating Costs and Property Taxes and abide by all other terms of the Lease."

Amended To:

"The Tenant shall have a Free Basic Rent period being **April 1, 2012** through to **August 15, 2012**. During this period, the Tenant shall pay to the Landlord its Proportionate Share of Operating Costs and Property Taxes and abide by all other terms of the Lease."

C) The Landlord and the Tenant hereby agree to extend the Condition Precedent as outlined in Clause 9 of the Offer as follows:

"9. CONDITIONS PRECEDENT — TENANT

This Offer and Acceptance is subject to the following Conditions Precedent being waived at the sole discretion of the Tenant:

(a) The Tenant's senior managements' and Board of Directors' unfettered approval of this Offer to Lease by **August 31, 2011** or such other time as may be subsequently agreed.

If the Tenant falls to notify the Landlord In writing that the Conditions Precedent have been satisfied or waived within the above noted respective timelines, then this Offer shall become null and void and neither party shall have further obligation to the other. This clause is for the sole benefit of the Tenant.

In consideration of $10.00 non-refundable paid by the Tenant to the Landlord, and other good and valuable consideration (the receipt and sufficiency of which the Landlord acknowledges), the Landlord agrees not to revoke this Offer while it remains subject to the foregoing Tenant's Conditions."

D) The Landlord and the Tenant hereby agree to extend the Condition Precedent as outlined in Clause 11 of the Offer as follows:

"11. OPTION TO EXPAND

Upon providing written notice to the Landlord no later than **August 31, 2011**, the Tenant shall have the option to lease the entire 3rd floor of the building on the same terms and conditions as the Leased Premises, subject to pars 13.

The third (3rd) floor of the Building shall be leased to the Tenant on an "as-is, where-is" basis and the Landlord will not be required to complete the Landlord's Work attached hereto as Schedule "B"."

ALL OTHER TERMS AND CONDITIONS TO REMAIN IN FULL FORCE AND EFFECT.

AGREED and ACCEPTED this 3rd day of June, 2011.

/s/ Authorized Signatory

Concert Realty Services Ltd., on behalf of Concert Real Estate Corporation

AGREED and ACCEPTED this 28th day of June, 2011.

/s/ Simon Pimstone

Xenon Pharmaceuticals Inc.

ADDENDUM / AMENDMENT #3

This Amendment/Addendum #3 dated for reference the **31st** day of **August, 2011** shall be attached to and become a part of the **Offer to Lease** accepted by the Landlord on November 9, 2010 and accepted by the Tenant on November 23, 2010, as amended by the Addendum/ Amendments dated for reference February 7, 2011 and June 1, 2011 (together, the "**Agreement**") between **Concert Real Estate Corporation** (**Landlord**) and **Xenon Pharmaceuticals Inc.** (**Tenant**)

Address: **3650 Gilmore Way, Burnaby, B.C.**

The Landlord and Tenant hereby agree for good and valuable consideration, to amend the Agreement as noted below:

A. Clause 6 of the Agreement shall be amended, as follows:

The term "within ten (10) business days after unconditional acceptance of this Offer",

shall be deleted and replaced with the following:

"within ten (10) business days after the date on which the Landlord has received the Surrender Notice from the Tenant (as referenced under Clause 11 of this Agreement)".

B. Clause 8 of the Agreement shall be amended by adding the following new sentence to the end of that Clause:

"The Landlord and the Tenant further confirm and agree that, at the Tenant's discretion, the the Landlord will pay the above-noted Allowance to the Tenant In two (2) separate installments, In such amounts and on such dates as may be requested by the Tenant. For the avoidance of doubt, the Landlord and the Tenant further confirm and agree that any surrender fee payable under Clause 13 of the Agreement, shall be calculated only on the unamortized portion of the Allowance actually paid to the Tenant by the Landlord, in addition to the unamortized portion of the real estate commissions, and the two (2) months gross rent, as indicated above."

C. Clause 11 of the Agreement shall be amended, as follows:

"11. OPTION TO EXPAND

Upon providing written notice to the Landlord no later than August 31, 2011, the Tenant shall have the option to lease the entire 3" floor of the building on the same terms and conditions as the Leased premises, subject to para 13,

The third (3rd) floor of the Building shall be leased to the Tenant on an "as-is, where-is" basis and the Landlord will not be required to complete the landlord's Work attached hereto as Schedule "B"."

shall be deleted and replaced with the following:

“11. OPTION TO SURRENDER

From September 1 through to September 30, 2011, the Tenant shall have the right to surrender and terminate that portion of the Leased Premises identified by heavy black marking on Exhibit “A” (the “**Expansion Premises**”) attached hereto at no cost or penalty, and the Landlord shall be responsible for all costs associated with multi-tenanting the floor to meet current building code In the event this option Is exercised (subject to the Landlord’s restoration rights within Section 8.4 of the current lease). The Tenant shall provide written notice to the Landlord, on or prior to September 30, 2011, respecting whether (or not) it intends to exercise its right to surrender the Expansion Premises (the “**Surrender Notice**)”. Such Surrender Notice may be delivered personally, by fax, or by courier, to the Landlord at the following address

Concert Real Estate Corporation
9th Floor,
1190 Hornby
Vancouver, BC
V6Z 2K5

Fax Number: 804-689-9611.

In the event that the Tenant does not deliver the Surrender Notice to the Landlord on or before September 30, 2011 as noted above, the Tenant shall be deemed to have delivered such Surrender Notice to the Landlord on October 1, 2011, and in such deemed Surrender Notice shall be deemed to have surrendered the Expansion Premises.”

D. Clause 13 of the Agreement shall be amended as follows:

“13. RIGHT OF TERMINATION

The second line with the Right of Termination Clause which reads:

“have the right to surrender the Lease on or at any time after the forty-eight (48th) month of”

Shall be deleted and replaced with the following::

“have the right to surrender the Lease on or at any time after the thirty-sixth(36th) month of”

E. The Landlord and the Tenant agree to amend Clause 9 of the Agreement, as follows:

The Tenant hereby removes its Condition Precedent within Clause 9, namely:

“9. CONDITIONS PRECEDENT - TENANT

“This Offer and Acceptance is subject to the following Conditions Precedent being waived at the sole discretion of the Tenant:

(a) The Tenant’s senior managements’ and Board of Directors’ unfettered approval of this Offer to Lease by August 31, 2011 or such other time as may be subsequently agreed.

If the Tenant fails to notify the Landlord In writing that the Conditions Precedent have been satisfied or waived within the above noted respective timelines, then this Offer shall become null and void and neither party shall have further obligation to the other. This clause is for the sole benefit of the Tenant.

In consideration of $10.00 non-refundable paid by the Tenant to the Landlord, and other good and valuable consideration (the receipt and sufficiency of which the Landlord acknowledges), the Landlord agrees not to revoke this Offer while it remains subject to the foregoing Tenant's Conditions."

Save and except as hereby amended, all of the terms and conditions of the Agreement are hereby ratified and confirmed and shall be in full force and effect, and time remains of the essence thereof. The Agreement, including this Amendment/Addendum #3 shall enure to the benefit of, .and be binding upon the parties hereto and their respective successors and permitted assigns. This Amendment/Addendum #3 may be executed and delivered in counterpart by facsimile or otherwise and each counterpart shall constitute an original and together shall constitute one and the same agreement.

The parties hereby acknowledge that all conditions precedent have been removed/waived and the Agreement is now a firm and binding contract between the parties.

CONCERT REALTY SERVICES LTD., on behalf of
CONCERT REAL ESTATE CORPORATION
(Landlord)

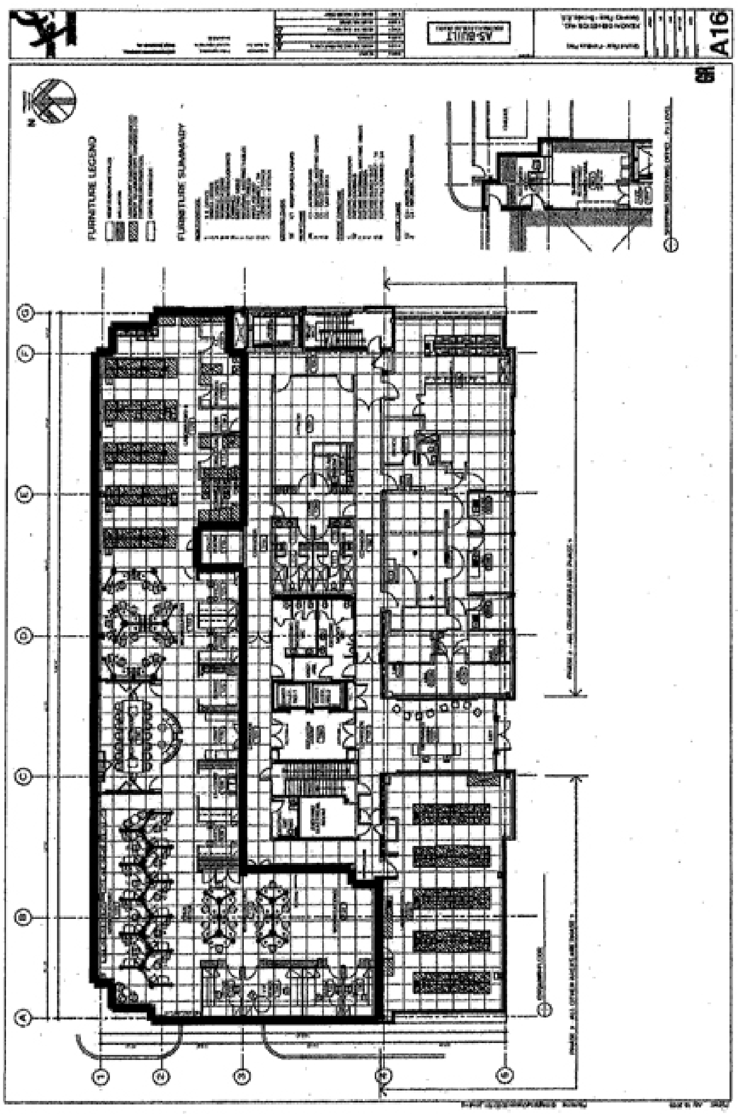
/s/ Authorized Signatory August 31, 2011
Authorized Signatory

XENON PHARMACEUTICALS INC.
(Tenant)

/s/ Simon Pimstone August 31, 2011
Authorized Signatory

Exhibit A

(See attached)



A16
AS-BUILT
FURNITURE LEGEND
FURNITURE SUMMARY

ADDENDUM / AMENDMENT #4

This Amendment/Addendum #4 dated for reference the **30th** day of **September, 2011** shall be attached to and become a part of the **Offer to Lease** accepted by the Landlord on November 9, 2010 and accepted by the Tenant on November 23, 2010, as amended by the Addendum/ Amendments dated for reference February 7, 2011, June 1, 2011 and August 31, 2011 (together, the "**Agreement**") between **Concert Real Estate Corporation** (**Landlord**) and **Xenon Pharmaceuticals Inc.** (**Tenant**)

Address: **3650 Gilmore Way, Burnaby, B.C.**

The Landlord and Tenant hereby agree for good and valuable consideration, to amend the Agreement as noted below:

Exhibit "A" to the Agreement shall be deleted and replaced with the Exhibit "A" attached hereto.

Save and except as hereby amended, all of the terms and conditions of the Agreement are hereby ratified and confirmed and shall be in full force and effect, and time remains of the essence thereof. The Agreement, including this Addendum/Amendment #4 shall "enure" to the benefit of, and be binding upon the parties hereto and their respective successors and permitted assigns. This Addendum/Amendment #4 may be executed and delivered in counterpart by facsimile or otherwise and each counterpart shall constitute an original and together shall constitute one and the same agreement.

The parties hereby acknowledge that all conditions precedent have been removed/waived and the Agreement is now a firm and binding contract between the parties.

CONCERT REALTY SERVICES LTD., on behalf of
CONCERT REAL ESTATE CORPORATION
(Landlord)

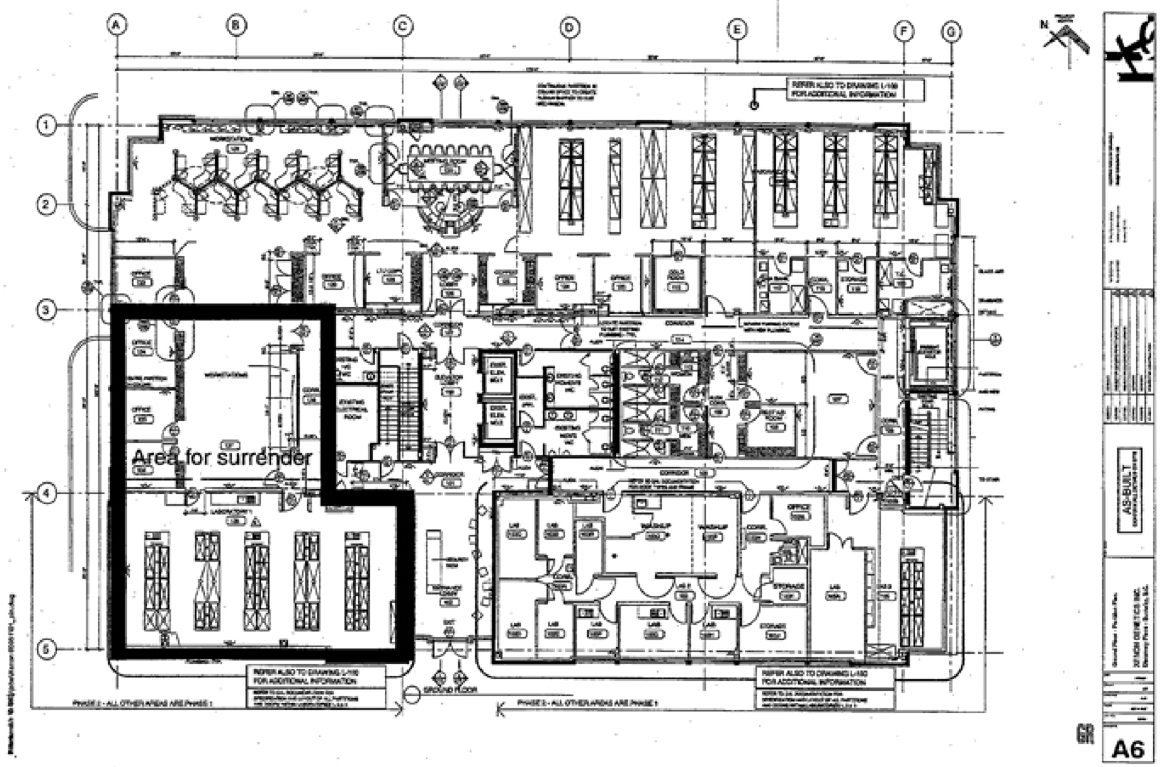
/s/ Authorized Signatory　　September 30, 2011
Authorized Signatory

XENON PHARMACEUTICALS INC.
(Tenant)

/s/ Simon Pimstone　　September 30, 2011
Authorized Signatory

Exhibit A

(See attached)



Area for surrender
AS-BUILT
A6
GR
REFER ALSO TO DRAWING L-100 FOR ADDITIONAL INFORMATION
PHASE 2 - ALL OTHER AREAS ARE PHASE 1
GROUND FLOOR
WORKSTATIONS
OFFICE
LAB
WASHUP
STORAGE
CORRIDOR

September 30, 2011

Delivered by Fax to 604-689-9611

Concert Real Estate Corporation
9th Floor
1190 Hornby
Vancouver, BC
V6Z 2K5

Re: **Surrender Notice**, pursuant to **Offer to Lease** respecting 3650 Gilmore Way, Burnaby, BC. accepted by Concert Real Estate Corporation (the "**Landlord**") on November 9, 2010 and accepted by **Xenon Pharmaceuticals Inc**. (the "**Tenant**") on November 23, 2010, as amended by the (4) Addendum/Amendments dated for reference February 7, 2011, June 1, 2011, August 31, 2011 and September 30, 2011 (together, the "**Agreement**")

Dear Sirs/Madams:

As set out in Clause 11 of the Agreement (and as specifically referenced under Addendum/Amendment #3 dated August 31, 2011 of same), the Tenant hereby provides notice to the Landlord that is has surrendered that portion of the Leased Premises identified by heavy marking on Exhibit "A" attached.

Kindly acknowledge receipt of this notice, by signing where indicated below, and returning, a copy of this letter by fax to the Tenant (to the attention of the President & CEO with copy to General Counsel), at 604-484-3450(fax).

Sincerely,

XENON PHARMACEUTICALS INC.
(Tenant)

/s/ Simon N. Pimstone September 30, 2011
Simon N. Pimstone
President & CEO

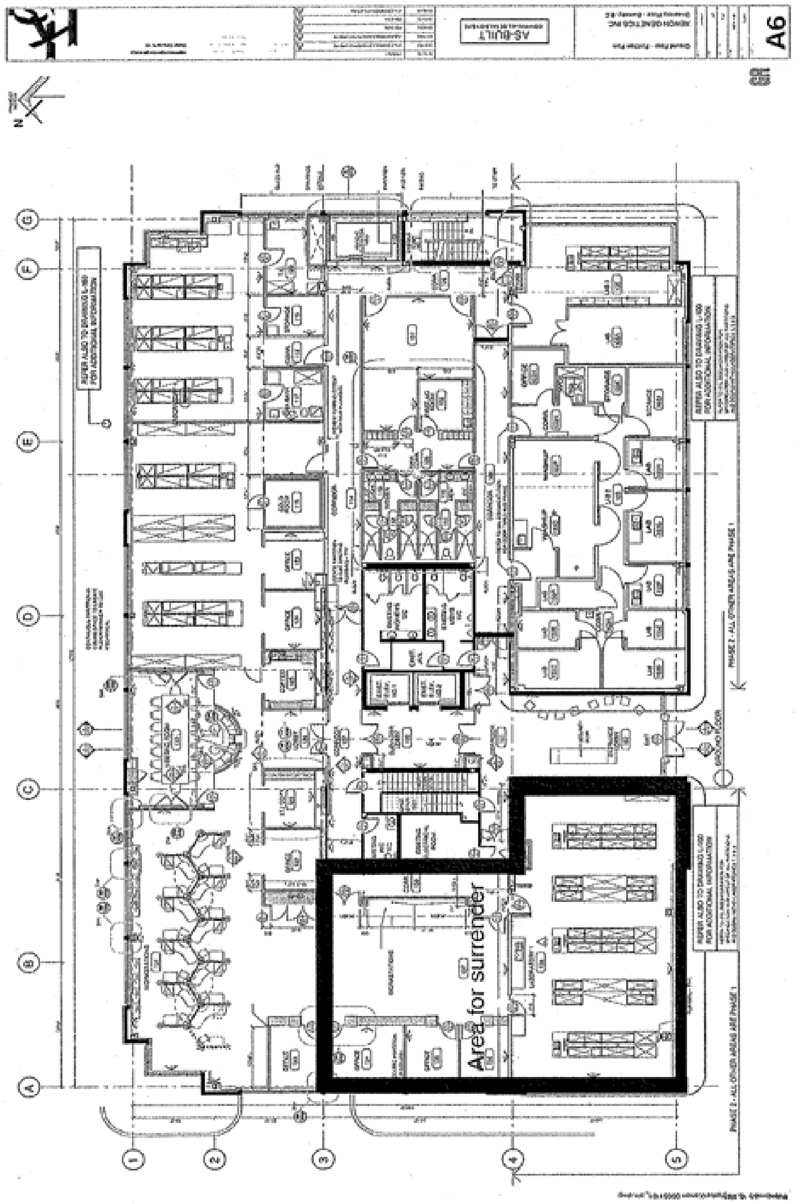
Receipt of this notice is hereby confirmed and acknowledged by the Landlord

CONCERT REALTY SERVICES LTD., on behalf of
CONCERT REAL ESTATE CORPORATION
(Landlord)

/s/ Allen Glazer, VP Property Management Date:
Authorized Signatory

Exhibit A

(See attached)


A6
AS-BUILT
Area for surrender

Addendum/Amendment #5

This addendum/amendment dated for reference the **19th day of October, 2011** shall be attached to and become part of the offer to lease accepted by the Landlord on November 9, 2010 and accepted by the Tenant on November 23, 2010, the addendum/amendment dated for reference February 7, 2011, the addendum/amendment dated for reference June 1, 2011, the addendum/amendment #3 dated for reference August 31, 2011, and the addendum/amendment #4 dated for reference September 30, 2011 (together, the "Offer") between Concert Realty Services Ltd., on behalf of Concert Real Estate Corporation ("Landlord") and Xenon Pharmaceuticals Inc. ("Tenant").

Address: **3650 Gilmore Way, Burnaby, British Columbia**

The Landlord and the Tenant hereby agree to amend the **Lease** clause in Clause 6 of the Offer as follows:

"6. LEASE

The Lease shall be in the form of the existing Lease, allowing for reasonable amendments thereto as requested by the Landlord and Tenant. The final form of Lease, including the terms and conditions of this Offer and all agreed amendments thereto shall be delivered by the Landlord to the Tenant **on or before October 28, 2011**. The Lease shall be executed and delivered by the Tenant to the Landlord within five (5) business days of receipt by the Tenant".

ALL OTHER TERMS AND CONDITIONS TO REMAIN IN FULL FORCE AND EFFECT.

AGREED and ACCEPTED this **19th day of October, 2011**.

/s/ Authorized Signatory

Concert Realty Services Ltd., on behalf of Concert Real Estate Corporation

AGREED and ACCEPTED this **19th day of October, 2011**.

/s/ Karen G. Corraini

Xenon Pharmaceuticals Inc.
KAREN G. CORRAINI
GENERAL COUNSEL & CORPORATE SECRETARY

Addendum/Amendment #6

This addendum/amendment dated for reference the **28th day of October, 2011** shall be attached to and become part of the offer to lease accepted by the Landlord on November 9, 2010 and accepted by the Tenant on November 23, 2010, the addendum/amendment dated for reference February 7, 2011, the addendum/amendment dated for reference June 1, 2011, the addendum/amendment #3 dated for reference August 31, 2011, the addendum/amendment #4 dated for reference September 30, 2011, and the addendum/amendment #5 dated for reference October 19, 2011 (together, the "Offer") between Concert Realty Services Ltd., on behalf of Concert Real Estate Corporation ("Landlord") and Xenon Pharmaceuticals Inc. ("Tenant").

Address: **3650 Gilmore Way, Burnaby, British Columbia**

The Landlord and the Tenant hereby agree to amend the **Lease** clause in Clause 6 of the Offer as follows:

"6. LEASE

The Lease shall be in the form of the existing Lease, allowing for reasonable amendments thereto as requested by the Landlord and Tenant. The final form of Lease, including the terms and conditions of this Offer and all agreed amendments thereto shall be delivered by the Landlord to the Tenant **on or before November 9, 2011**. The Lease shall be executed and delivered by the Tenant to the Landlord within **ten (10)** business days of receipt by the Tenant."

ALL OTHER TERMS AND CONDITIONS TO REMAIN IN FULL FORCE AND EFFECT.

AGREED and ACCEPTED this **28th day of October, 2011**.

/s/ Authorized Signatory

Concert Realty Services Ltd., on behalf of Concert Real Estate Corporation

AGREED and ACCEPTED this **28th day of October, 2011**.

/s/ Karen G. Corraini

Xenon Pharmaceuticals Inc.

Addendum/Amendment #7

This addendum/amendment dated for reference the **9th day of November, 2011** shall be attached to and become part of the offer to lease accepted by the Landlord on November 9, 2010 and accepted by the Tenant on November 23, 2010, the addendum/amendment dated for reference February 7, 2011, the addendum/amendment dated for reference June 1, 2011, the addendum/amendment #3 dated for reference August 31, 2011, the addendum/amendment #4 dated for reference September 30, 2011, the addendum/amendment #5 dated for reference October 19, 2011, and the addendum/amendment #6 dated for reference October 28, 2011 (together, the “Offer”) between Concert Realty Services Ltd., on behalf of Concert Real Estate Corporation (“Landlord”) and Xenon Pharmaceuticals Inc. (“Tenant”).

Address: **3650 Gilmore Way, Burnaby, British Columbia**

The Landlord and the Tenant hereby agree to amend the **Lease** clause In Clause 6 of the Offer as follows:

“6. LEASE

The Lease shall be in the form of the existing Lease, allowing for reasonable amendments thereto as requested by the Landlord and Tenant. The final form of Lease, including the terms and conditions of this Offer and all agreed amendments thereto shall be delivered by the Landlord to the Tenant **on or before November 10, 2011**. The Lease shall be executed and delivered by the Tenant to the Landlord within **ten (10)** business days of receipt by the Tenant.”

ALL OTHER TERMS AND CONDITIONS TO REMAIN IN FULL FORCE AND EFFECT.

AGREED and ACCEPTED this **9th day of November, 2011**.

/s/ Authorized Signatory

Concert Realty Services Ltd., on behalf of Concert Real Estate Corporation

AGREED and ACCEPTED this **14th day of November, 2011**.

/s/ Simon Pimstone

Xenon Pharmaceuticals Inc.

Addendum/Amendment #8

This addendum/amendment dated for reference the **25th day of November, 2011** shall be attached to and become part of the offer to lease accepted by the Landlord on November 9, 2010 and accepted by the Tenant on November 23, 2010, the addendum/amendment dated for reference February 7, 2011, the addendum/amendment dated for reference June 1, 2011, the addendum/amendment #3 dated for reference August 31, 2011, the addendum/amendment #4 dated for reference September 30, 2011, the addendum/amendment #5 dated for reference October 19, 2011, the addendum/amendment #6 dated for reference October 28, 2011, the addendum/amendment #7 dated for reference November 9, 2011 (together, the "Offer") between Concert Realty Services Ltd., on behalf of Concert Real Estate Corporation ("Landlord") and Xenon Pharmaceuticals Inc. ("Tenant").

Address: **3650 Gilmore Way, Burnaby, British Columbia**

The Landlord and the Tenant hereby agree to amend the **Lease** clause In Clause 6 of the Offer as follows:

"6. LEASE

The Lease shall be in the form of the existing Lease, allowing for reasonable amendments thereto as requested by the Landlord and Tenant. The Landlord's proposed final form of Lease, Including the terms and conditions of this Offer and all agreed amendments thereto shall be delivered by the Landlord to the Tenant on or before 2 p.m (Vancouver time) on November 28, 2011. The Lease shall be **mutually agreed by both parties and executed by both parties on or before November 29, 2011 at 5:00 p.m. (Vancouver Time)**."

ALL OTHER TERMS AND CONDITIONS TO REMAIN IN FULL FORCE AND EFFECT.

AGREED and ACCEPTED this **25th day of November, 2011**.

/s/ Authorized Signatory

Concert Realty Services Ltd., on behalf of Concert Real Estate Corporation

AGREED and ACCEPTED this **25th day of November, 2011**.

/s/ Karen G. Corraini

Xenon Pharmaceuticals Inc.

Addendum/Amendment #9

This addendum/amendment dated for reference the **29th day of November, 2011** shall be attached to and become part of the offer to lease accepted by the Landlord on November 9, 2010 and accepted by the Tenant on November 23, 2010, the addendum/amendment dated for reference February 7, 2011, the addendum/amendment dated for reference June 1, 2011, the addendum/amendment #3 dated for reference August 31, 2011, the addendum/amendment #4 dated for reference September 30, 2011, the addendum/amendment #5 dated for reference October 19, 2011, the addendum/amendment #6 dated for reference October 28, 2011, the addendum/amendment #7 dated for reference November 9, 2011, and the addendum/amendment #8 dated for reference November 25, 2011 (together, the "Offer") between Concert Realty Services Ltd., on behalf of Concert Real Estate Corporation ("Landlord") and Xenon Pharmaceuticals Inc. ("Tenant").

Address: **3650 Gilmore Way, Burnaby, British Columbia**

The Landlord and the Tenant hereby agree to amend the **Lease** clause In Clause 6 of the Offer as follows:

"6. LEASE

The Lease shall be in the form of the existing Lease, allowing for reasonable amendments thereto as requested by the Landlord and Tenant. The Landlord's proposed final form of Lease, Including the terms and conditions of this Offer and all agreed amendments thereto shall be delivered by the Landlord to the Tenant on or before 2:00 p.m. (Vancouver Time) on November 28, 2011. The Lease shall be **mutually agreed by both parties and executed by both parties on or before December 6, 2011 at 5:00 p.m. (Vancouver Time)**."

ALL OTHER TERMS AND CONDITIONS TO REMAIN IN FULL FORCE AND EFFECT.

AGREED and ACCEPTED this **29th day of November, 2011**.

/s/ Authorized Signatory

Concert Realty Services Ltd., on behalf of Concert Real Estate Corporation

AGREED and ACCEPTED this **29th day of November, 2011**.

/s/ Karen G. Corraini

Xenon Pharmaceuticals Inc.
KAREN G. CORRAINI
GENERAL COUNSEL & CORPORATE SECRETARY

LEASE EXTENSION AND MODIFICATION AGREEMENT

This Agreement made effective the **27th day of October, 2011**.

BETWEEN:

CONCERT REAL ESTATE CORPORATION

(the "**Landlord**")

AND:

XENON PHARMACEUTICALS INC.

(the "**Tenant**")

WHEREAS:

A. By, a lease made in 2001 (the "**Original Lease**") between Discovery Parks Incorporated (the "**Original Landlord**") and Xenon Genetics Inc.,(the "**Original Tenant**"), the Original Tenant leased certain premises (the "**Original Premises**") comprising the whole of the building (the "**Building**") located on property known as 3650 Gilmore Way, Burnaby, British Columbia, as more particularly described in the Original Lease for a term of ten (10) years expiring on April 14, 2011;

B. The Landlord is the successor in interest to the Original Landlord;

C. The Tenant successor in interest to ti.i0 OriginalTeri

D. By a lease extension and modification agreement made effective November 8, 2010 (the "**First Modification**") between the Landlord and Tenant, the Landlord and the Tenant agreed to extend the term of the Original Lease for an additional four (4) months and sixteen (16) days, for a term expiring on August 31, 2011, as further described in the First Modification.

E. By a lease extension and modification agreement made effective February 7, 2011 (the "**Second Modification**") between the Landlord and Tenant, the Landlord and the Tenant agreed to extend the term of the Original Lease for an additional four (4) months, for a term expiring on December 31, 2011, as further described in the Second Modification.

F. By a lease extension and modification agreement made effective June 1, 2011 (the "**Third Modification**") between the Landlord and Tenant, the Landlord and Tenant agreed to extend the term of the Original Lease for an additional three (3) months, for a term expiring on March 31, 2012, as further described in the Third Modication (the Original Lease as modified by the First Modification, the Second Mddification and the Third Modification is referred to herein as the: "**Lease**");

G. By an Offer to Lease (the "**Original Offer**") accepted by the Landlord on November 9, 2010 and accepted by the Tenant on November 23, 2010, the Landlord and Tenant agreed that the Tenant would continue to lease a portion (the "**Proposed New Premises**", being the whole of the lst and 2nd floors of the Building) of the Original Premises, as more particularly described in the Offer, for a term of 120 months commencing on September 1, 2011, on the terms and conditions set out in the Origin Offer;

H. By an Addendum/Amendment (the "**First Addendum**") dated for reference February 7, 2011, the Original Offer was amended as set out therein;

I. By an Addendum/Amendment (the "**Second Addendum**") dated for reference June 1, 2011, the Original Offer, as amended, was further amended as set out therein;

J. By an Addendum/Amendment (the "**Third Addendum**") dated for reference August 31, 2011, the Original Offer, as amended, was farther amended as set out therein, including adding a right for the Tenant to elect to surrender and terminate its rights under the Original Offer in respect of that portion (the "**Surrender Area**") of the Proposed New Premises shown on the plan attached to the Third Addendum as Exhibit A;

K. By an Addendum/Amendment (the "**Fourth Addendum**") dated for reference September 30, 2011, the Original Offer, as amended, was further amended by replacing the plan of the Surrender Area attached to the Third Addendum as Exhibit A with the plan attached as Exhibit A to the fOurth Addendum;

L By a letter (the "**Surrender Letter**") dated September 30, 2011, the Tenant notified the Landlord that the Tenant was exercising its right to surrender and terminate its rights under the Original Offer in respect of the Surrender Area;

M. The Original Offer, as emended by the First Addendum, Second Addendum, Third Addendum, Fourth AddendUrn and Sufrender Letter, is herein referred to as the "**Offer**" and the proposed New Premises, excluding the Surrender Area are referred to as the "**Premises**");

N. The Landlord and the tenant acknowledge and agree that the recitals hereto are true and incontrovertible;

O. The Landlord and the Tenant have agreed to amend the Lease to incorporate the terms of the Offer on the terms set out herein.

THEREFORE in consideration of the premises, the mutual covenants and agreements contained herein and other good and valuable Consideration, the receipt and sufficiency of which is hereby acknowledged by each of the parties hereto, the parties agree as follows:

1. The Landlord and Tenant hereby agree to extend the term of the Lease for a further term (the "**Extension Term**") of ten (10) years commencing on April 1, 2012 (the "**Extension Term Commencement Date**") and terminating on March 31, 2022 on and subject to the terms of the Lease except as amended herein.

2. As of the Extension Term Commencement Date, the Lease is amended as follows:

   (a) In section 1.1, the phrase "Rentable Area of approximately 56,776 square feet, being the entire Building situated thereon, as set out in Schedule "A" attached hereto" is deleted and replaced With "Rentable Area of approximately 34,000 square feet, subject to confirmation pursuant to section 3.3 below, being a portion of the first floor and the entire second floor of the Building situated thereon, as set out in Schedule "A" attached hereto. The Rentable Area shall further be adjusted to reflect the Tenant's Proportionate Share of Common Areas as per section 3.3 below.

(b) In section 2.1:

(i) the phrase “of ten (10) years” is deleted in its entirety; and

(ii) the phrase “expiring on the day immediately prior to the tenth anniversary of the Commencement Date” is deleted and replaced with “expiring on March 31, 2022”;

(c) section 3.1 of the Lease is amended as follows:

(i) The address of the Landlord is deleted and replaced with “9th Floor, 1190 Hornby Street, Vancouver, BC V6Z 2K5”;

(ii) The following is added at the bottom of the table set out therein:

“Period	**Per Square Foot**	**Approximate Basic Rent Per Annum**	**Approximate Basic Rent Per Month**
April 15, 2011 - March 31, 2012	$ 19.50	$1,107,132.00	$ 92,261.00
April 1, 2012 - March 31, 2017	$ 19.50	$ 663,000.00	$ 55,250.00
April 1, 2017 - March 31, 2022	$ 21.00	$ 714,000.00	$ 59,500.00

The Tenant shall have a Free Basic Rent Period from April 1, 2012 through to August 15, 2012. During this period, the Tenant shall pay to the Landlord its Proportionate Share of Operating Expenses and property taxes and abide by all other terms of the Lease.”;

(d) section 3.2 is deleted and replaced with the following:

*The Tenant has paid to the Landlord the sum of Eighty Nine Thousand Nine Hundred and Sixty Four Dollars ($89,964.00) as a deposit. The deposit shall be held by the Landlord, without liability for interest, as security for any and all present and future debts and liabilities of the Tenant to the Landlord in connection with its obligations (the “Obligations”) arising under this Lease for the term of the Lease. In the event the Landlord shall from time to time apply any or all of such deposit towards payment of the Obligations, the Tenant shall, from time to time at the request of the Landlord, forthwith pay to the Landlord the sum required to return the deposit to its original amount. If the Landlord disposes of its interest in this Lease, the Landlord shall credit the deposit to its successor and thereupon shall have no liability to the Tenant to repay the deposit to the Tenant. If the Tenant shall from time to time fail to perform its Obligations, the Landlord may apply all or part, as the case may be, of the deposit to rectify such failure. Subject to the foregoing, the Landlord shall repay the deposit to the Tenant 30 days after the end of the Term or sooner termination of the Lease, provided that all Obligations of the Tenant are paid and performed in full, failing which the Landlord may, on notice to the Tenant, elect to retain the deposit and to apply it in reduction of the Obligations and the Tenant shall remain fully liable to the Landlord for payment and performance of the remaining Obligations.”

(e) section 3.3 is amended as follows:

(i) by adding the following at the beginning:

"The Actual Rentable Area of the Premises shall be measured in accordance with the BOMA Standard."; and

(ii) by adding the following paragraph after the first paragraph of section 3.3:

"The Rent shall be $19.50 per square foot per year from April 1, 2012 to March 31, 2017 (excepting the Free Basic Rent Period from April 1, 2012 to August 15, 2012) and $21.00 per square foot per annum for the period from April 1, 2017 to March 31, 2022."

(f) section 3.4 is amended by deleting the phrase "or the Offer to Lease";

(g) section 3.7 is deleted in its entirety and replaced with "Intentionally deleted";

(h) section 4.1 is amended by deleting the phrase "and for related business activities all in accordance with the zoning by-laws of the City of Burnaby" and replacing it with the phrase ", for related business activities and for the operation of a vivarium and any other use permitted under the applicable zoning by-laws for the Building";

(i) section 5.1(a) is amended by adding the following at the end:

"Additional Rent is estimated at seven dollars and thirty-five cents ($7.35) per square foot of Rentable Area for the fiscal year of the Building ending September 30, 2010.";

(j) section 5.1(j) is deleted in its entirety and replaced with "Common Areas" means, without duplication, (1) those areas of the Land not intended by the Landlord for lease by tenants and (2) those areas of the Building that are Common Areas in accordance with the definition of "Common Areas" set out in the BOMA Standard:";

(k) section 5.1(s) is deleted in its entirety and replaced with "Leasehold Improvements" means all fixtures, trade fixtures, improvements, installations, alterations, and additions from time to time made, erected, or installed by, or on behalf of, the Tenant in the Premises, with the exception of furniture and equipment not of the nature of fixtures";

(l) section 5.1(v) is deleted in its entirety and replaced with "intentionally deleted";

(m) section 6.9 is amended by adding the following at the end:

"Notwithstanding the foregoing, the Tenant shall be granted non-exclusive signage on the Building, subject to the terms and conditions in the Lease, all existing signage shall remain in place during the Term and any extension thereof.";

(n) section 16.4 is deleted in its entirety and replaced with "intentionally deleted";

(o) section 6.15 is deleted in its entirety and replaced with “intentionally deleted”;

(p) section 6.20(a) is amended by deleting the figure “$2,000,000.00” and replacing it with “$5,000,000.00”;

(q) Article 27 is deleted in its entirely and replaced with “intentionally deleted”;

(r) in Section 28.1:

(i) the phrase “and Offer to Lease” in line 2 is deleted; and

(ii) the last sentence is deleted in its entirety;

(s) Section 29.1(b) and Articles 30, 31 and 32 are each deleted in their entirety and replaced with “intentionally deleted”;

(t) new Articles 33, 34, 35, 36 and 37 are added as follows:

“33.0 FIRST OPPORTUNITY TO LEASE

33.1 Provided, that the Tenant has not been in material breach of the Lease, the Tenant shall have the first opportunity, to lease any space becoming available for lease on the third (3rd) floor of the Building at any time during the Term that is not encumbered by another lease. The Basic Rent payable on the said space shall be the current fair market rental as agreed to by the parties and failing such agreement, as determined by arbitration by a single arbitrator pursuant to the *Commercial Arbitration Act* of British Columbia. The cost of the arbitrator will be shared equally between the parties. The Tenant shall have the right to assign this First Opportunity to Lease to a permitted assignee under this Lease concurrently with the assignment by the Tenant to such assignee of all of the Tenant’s rights under this Lease.

34.0 OPTION TO RENEW

34.1 Provided the Tenant has not been in breach of the Lease, the Tenant shall have the right to extend the Term of the Lease with respect to the Premises and any additional space leased by the Tenant for an additional two (2) consecutive terms of five (5) years each on the same terms and conditions as contained in the Lease, save only the Basic Rent, any free rent, landlord’s work, tenant allowances, or other tenant inducements and this option to renew. To exercise this right, the Tenant shall give written notice to the Landlord no earlier than twelve (12) months and no later than nine (9) months prior to the expiry of the Term or the expiry of the immediately preceding extension period (as the case may be); and if such notice is not given, this option to extend shall be deemed waived and of no further effect and any additional extension periods will be null and void. The Basic Rent payable during each such extension period shall be the fair market rent for the premises and any additional space leased by the Tenant, taking into account the inducements being offered in the Market and excluding the value of any improvements that have been constructed or installed at the expense of the Tenant. In any event, the Basic Rent per annum shall not be less than the Basic Rent payable in the last year of the expiring term. In the event that Landlord and Tenant are unable to reach agreement on the Basic Rent, the

Basic Rent shall be determined by arbitration by a single arbitrator pursuant to the Commercial Arbitration Act of British Columbia. The cost of the arbitrator will be shared equally between the parties.

35.0 RIGHT OF TERMINATION

35.1 Provided that the Tenant has not been in material breach of the Lease, the Tenant shall have the right to surrender the Lease on or at any time after March 31, 2015 (the "**Right to Terminate**") by providing a minimum of twelve (12) months prior written notice to the Landlord and, upon providing written notice to cancel the Lease, paying a surrender "fee calculated as the unamortized portion of the contribution paid by the Landlord to the Tenant in relation to the extension of the Term for the period from April 1, 2012 to March 31, 2022, being Twenty-five Dollars ($25.00) per square foot of Rentable Area of the Premises (the "**Allowance**"), the unamortized portion of real estate commissions paid by the landlord, and two (2) months' **Rent**; plus applicable taxes. For the purpose of this calculation, the Allowance and commission shall be amortized over the period from April 1, 2012 to March 31, 2022 at an effective interest rate of 7% per annum, compounded semi-annually.

36.0 PARKING

36.1 The Tenant shall be provided surface and underground parking stalls based on its proportionate share and in common with other tenants in the Building (if any) on a first-come, first-served basis (random stalls), free of any monthly parking charge for the balance of the Term from April 1, 2012 and any renewals thereof. The Tenant may designate underground parking spaces allocated to it for use as storage areas or other uses and may fence these off or construct demising walls, subject to the Landlord's approval and compliance with building codes, and subject to not impeding access to the balance of the parking stalls. The Tenant covenants that all fencing or demised walls for such storage areas shall be removed at the Tenant's sole cost and expense prior to the Lease expiry and all damages caused by such removal shall be repaired by the Tenant at is sole cost and expense.

37.0 RESTORATION

37 1 The Tenant shall not be responsible for any costs associated with converting the main floor lobby or other portions of the Building for multi-tenant purposes. Upon expiry of the term; or any permitted renewal/cancellation thereof, the Tenant shall, subject to Section 8.4 only be responsible for removing any Leasehold Improvements or Tenant's Work located in the Portion of its Premises within the first (1st) and second (2nd) floor, and to a maximum amount of $800,000 plus applicable taxes."; and

(u) Existing Articles 33.0 and 34.0 are renumbered Articles 38.0 and 39.0, respectively.

(v) Schedule A is deleted and replaced with Schedule "A" attached hereto.

3. For greater clarity, after the First Measurement, Rent will be adjusted, and calculated retroactive to the Extension Term Commencement Date, and after the Second Measurement, Rent will be adjusted

and calculated retroactive, to the date of the Landlord's commencement of its work on the Surrender Area to create an entrance lobby and an elevator lobby to convert the Building to a multi-tenant building (the "Building Conversion Work"). The Actual Rentable Area of the. **Proposed New Premises** shall be measured in accordance with the BOMA Standard within thirty (30) days of the Extension Term Commencement Date (the "First Measurement"). The Actual Rentable Area of the Premises shall further be measured, in, accordance with the BOMA Standard within thirty (30) days, after completion by the Landlord, of the Building Conversion Work (the "Second Measurement"). All such BOMA surveys shall be done at the Landlord's cost.

(4) The Premises shall be accepted, by the Tenant on an "as is" basis with the exception of the Landlord's Work outlined on Schedule "B" attached hereto. The Landlord's Work shall be completed by the Landlord at mutually accepted date(s) and time(s) between the Landlord and the Tenant and to the Building standard. Prior to commencing any of the Landlord's Work, Landlord will provide the Tenant with plans of its intended improvement work (consisting of applicable electrical, mechanical and architectural drawings, specifications and other appropriate information) for review and approval by the Tenant, acting reasonably. The Tenant acknowledges and agrees that if Landlord's Work is required, some of this Landlord's Work may have to be done after the Tenant vacates the third (3rd) floor of the Building.

The Tenant acknowledges and agrees that during such time when the Landlord, or its appointed contractors, subcontractors, or employees is/are conducting the Landlord's Work in the Building, the Tenant will be in the Premises in common with the Landlord, its contractors, subcontractors, or employees. The Landlord will make reasonable efforts to ensure that the operation of the Tenant's business is not disrupted during the Landlord's work period, however, the Tenant acknowledges and agrees that during the Landlord's Work period, there will be disruptions throughout the Tenant's business hours (or after business hours), and the Tenant shall make its best commercial efforts to cooperate with the Landlord, its appointed contractors, sub-contractors, or employees during the Landlord's Work period to ensure that the Landlord's Work proceeds efficiently.

The Landlord shall arrange and be financially responsible for all installation costs for separate metering of all utilities supplied to the Tenant pursuant to the Lease. This may be by way of a sub-meter and include third-party monitoring which shall form part of the tenant's Operating Expenses payable under the Lease.

5. The Landlord will pay to the Tenant, as a contribution towards the cost of the Tenant's Leasehold Improvements to that portion of the Premises that comprises the Rentable Area as of the Extension Term Commencement Date (the "**Tenant's Work**"), the Allowance, plus applicable taxes. This Allowance shall be payable upon the completion of the items listed hereto in Schedule "C", which shall be incorporated into the Landlord's standard Tenant Work Agreement attached hereto as Schedule "D". Should the Tenant's Work cost less than the Allowance, the difference will be applied on account of the Basic Rent and Operating Expenses and Property Taxed payments due under the Lease from April 1, 2012 to a maximum. of up to Ten Dollars ($10.00) per square foot of Rentable Area of the Premises, plus applicable taxes.

The Landlord and the Tenant further confirm and agree that, at the Tenant's discretion, the Landlord will pay the above-noted Allowance to the Tenant in two (2) separate installments, in such amounts and on such dates as may be requested by the Tenant. For the avoidance of doubt the Landlord and the Tenant further confirm and agree that any surrender fee payable under Article 35.0 of the lease, being the Right of Termination, shall be calculated only on the unamortized portion of the Allowance actually paid to the Tenant by the Landlord in addition to the unamortized portion of the real estate commissions and the two (2) month' **Rent**, as stated in Article 35.0 of the Lease.

6. The Landlord acknowledges and agrees that in the event the Landlord elects to require the Tenant to demolish improvements as set out in clause 8.4 of the Lease with respect to the third floor of the Building (such improvements which, for the avoidance of doubt, include Leasehold Improvements), the Tenant shall not be responsible for any costs associated with converting the third floor of the Building to multi-tenant use in compliance with building codes, including without limitation those costs associated with construction of corridors, demising walls, and the modifications to the Building's mechanical and electrical systems.

7. The parties confirm and ratify the terms and conditions contained in the Lease as amended by this Agreement.

8. This Agreement will, from the Effective Date, be read and construed together with the Lease, and the Lease, as amended hereby, shall continue in full force and effect for the remainder of the term of the Lease in accordance with the terms thereof and hereof.

9. This Agreement will enure to the benefit of and be binding upon the heirs, executors, administrators, successors and permitted assigns of the parties.

10. The Landlord covenants and agrees that it will apply to the City of Burnaby, at its sole expense, for all approvals required in connection with allowing that area located on the 3rd floor of the Building currently housing the Tenant's existing server room, as shown on Schedule "E" attached hereto (the "**Server Room Area**") to remain as part of the Tenant's leased Premises after the Landlord demises the third (3rd) floor of the Building, and that it will use reasonable commercial efforts to obtain such approvals from the City of Burnaby on or before January 31, 2012. Provided that all required approvals are received from the City of Burnaby by the Extension Term Commencement Date, the Landlord agrees to lease to the Tenant, commencing on the Extension Term Commencement Date, the Server Room Area, on the same terms and conditions as the Lease, as amended by this Agreement. If the Server Room Area is leased, by the Landlord to the Tenant, the definition of "Proposed New Premises" and "Premises" in this Agreement will be amended to include the Server Room Area, and the table in section 3.1 of the Lease, as amended, setting out the Basic Rent per annum and per month, will be updated accordingly. The Landlord covenants and agrees that if it leases the Server Room Area to the Tenant, the Tenant will be entitled to access the Server Room Area at all times.

IN WITNESS WHEREOF the parties have executed this Agreement as of the date first above written.

CONCERT REAL ESTATE CORPORATION

By: /s/ Authorized Signatory
Authorized Signatory

By: /s/ Authorized Signatory
Authorized Signatory

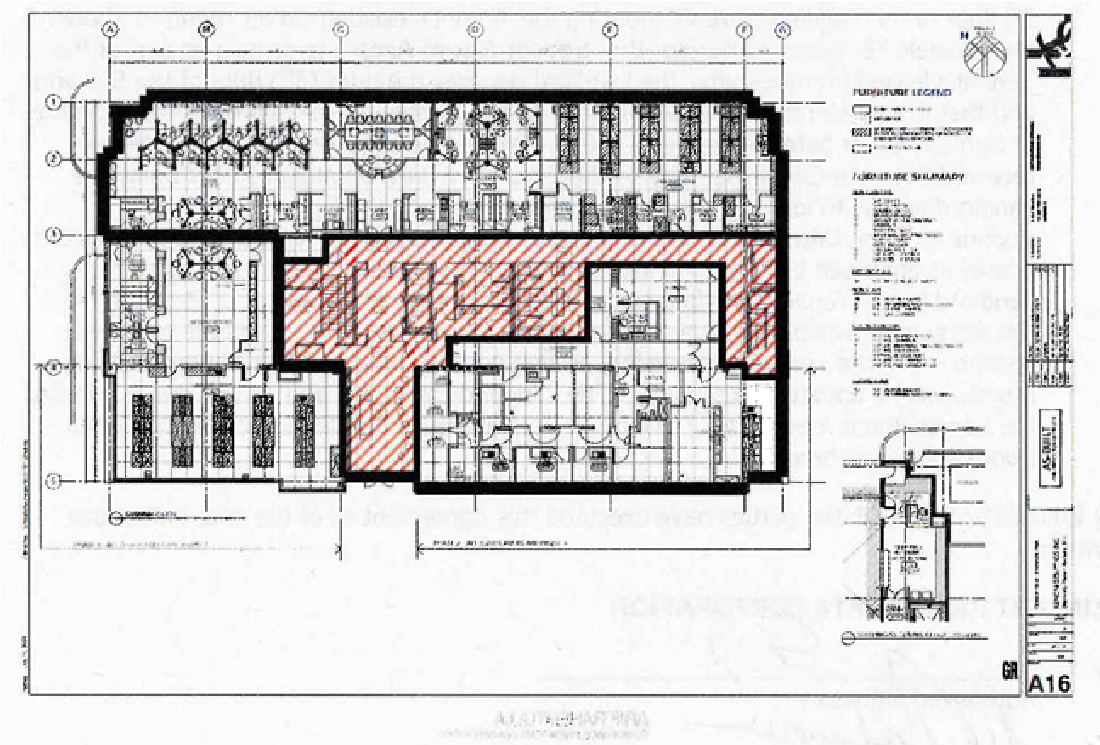
XENON PHARMACEUTICALS INC.

By: /s/ Simon Pimstone
Authorized Signatory

By: ______________________
Authorized Signatory

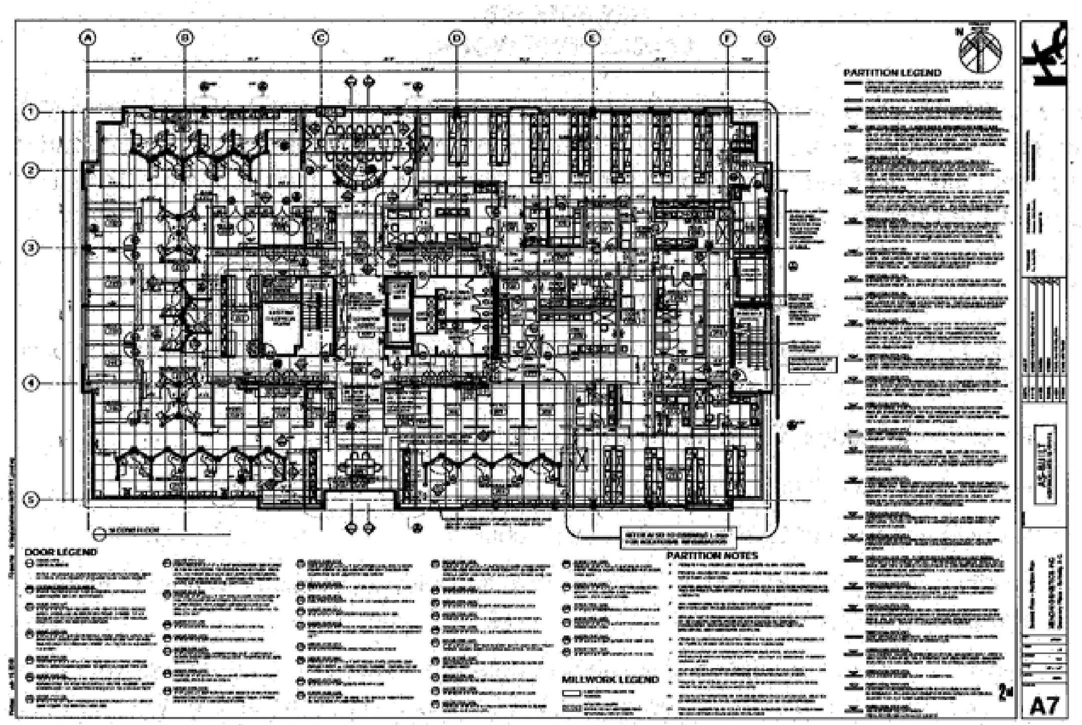
SCHEDULE A
PLAN

<u>1st Floor outlined in heavy black - Includes future Common Areas</u>



** The area hatched in red above indicates the approximate location of the Common Areas.**

2nd Floor - Tenant is leasing entire 2nd Floor



SCHEDULE B
LANDLORD'S WORK

The Landlord will, at its own expense, complete the following work on the Main and Third (3rd) floors of the Building in accordance with Section 3 of the Lease Extension and Modification Agreement made as of the 27th day of October, 2011 between the Landlord and the Tenant, in respect of the Common Area of the Building, and, to the extent that they are affected, the Premises:

(a) Where required, construct demising walls;

(b) Install double full height glass entrance doors plus full height solid core exit doors complete with magnetic card access system tied into the Building security system;

(c) Reconfigure heating, ventilation and air-conditioning (HVAC);

(d) Reconfigure automatic sprinkler system;

(e) Reconfigure elevator lobbies and entrance lobbies;

(f) Modify the security system to provide the Premises with autonomous security to mutually agreeable standards between the Landlord and the Tenant;

(g) Replace any cracked, chipped or stained ceiling acoustic tiles or drywall ceilings with new or like new matching acoustic ceiling tiles and finishes (in common area only);

(h) Where required by building code, the Landlord shall be responsible for seismic upgrades to base building T-bar ceiling, lighting systems and base Building mechanical systems.

The Tenant acknowledges and agrees that during such time when the Landlord, or its appointed contractors, sub-contractors, or employees is/are conducting the Landlord's Work in the Building, the Tenant will be in the Premises or the Additional Area in common with the Landlord, its contractors, sub-contractors, or employees. The Landlord will make reasonable efforts to ensure that the operation of the Tenant's business is not disrupted during the Landlord's Work period; however, the Tenant acknowledges and agrees that during the Landlord's Work period, there will be disruptions throughout the Tenant's Normal Business Hours (or after Normal Business Hours) and the Tenant shall make its best commercial efforts to co-operate with the Landlord, its appointed contractors, sub-contractors, or employees during the Landlord's Work period to ensure that the Landlord's Work proceeds efficiently.

SCHEDULE C
TENANT'S WORK

The Landlord agrees to pay to the Tenant an Allowance payable within ten (10) days after the completion of all of the following:

(a) execution and delivery of the Lease Extension and Modification Agreement made as of the 27th day of October, 2011 between the Landlord and the Tenant (the "**Lease Amending Agreement**") by the Tenant to the Landlord as well as full compliance by the Tenant with all Tenant obligations of the Lease;

(b) the Extension Term Commencement Date has passed;

(c) receipt of notice from the Tenant that it has completed the Tenant's Work contemplated in the Lease Amending Agreement;

(d) the applicable statutory lien holdback period shall have expired and any liens that may have been filed against the Premises or the property with respect to the work done by or on behalf of the Tenant with respect to the Premises shall have been discharged from title tithe property; and

(e) receipt by the Landlord of:

(i) a copy of the Tenant's final inspection permit for the Tenant's Work within the Premises and a copy of the Tenant's business license, if required;

(ii) an officer's certificate or a statutory declaration by a principal of the Tenant of payment in full of all costs relating to the Tenant's Work;

(iii) copies of receipted invoices for the Tenant's Work substantiating the amount that has been expended and paid Par by the Tenant;

(iv) a letter from the Workers' Compensation Board of B.C. ("WorkSafeBC") confirming that the Tenant and its general contractor have satisfied all assessment requirements of the WorkSafeBC to the date which is thirty days following the date of substantial completion of the Tenant's Work; and

(v) a copy of the certificate of completion signed by the payment certifier in respect of the Tenant's Work, or if a payment certifier is not available, a certificate of Substantial Completion from the Tenant's contractor.

SCHEDULE D
TENANT WORK AGREEMENT

i) Under the Lease made in 2001 ‘between Discovery Parks Incorporated and Xenon Genetics Inc., as assigned to Concert Real Estate Corporation (the “**Landlord**”) and Xenon Pharmaceuticals, Inc (the “**Tenant**”), and as amended, including a Lease Extension and Modification Agreement made as of the 27th day of October, 2011 between the Landlord and the Tenant (the “**Lease Amending Agreement**”) (collectively, the “**Lease**”), the Landlord agreed to pay to the Tenant an allowance (the “**Allowance**”) in the amount and on the terms more particularly set out in the Lease;

ii) The parties have entered into this Agreement to supplement their agreement with respect to the Allowance on the terms set out herein.

NOW THEREFORE in consideration of the respective covenants made by the parties in the Lease and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged the parties agree as follows:

ARTICLE 1
APPLICATION ALLOWANCE

1.01 The Tenant covenants and agrees with the Landlord that the Tenant shall utilize the Allowance to complete certain improvements to the Premises (as defined and more particularly set out in the Lease) to prepare them for use and occupation by the Tenant.

ARTICLE 2
REQUIREMENTS FOR TENANT’S WORK

2.01 The Tenant shall accept the Premises in “as is, where is” condition, excepting only the work, if any, specifically set out in the Lease to be completed by the Landlord. It is the Tenant’s responsibility to ensure that the Premises are finished in a good and, professional manner and with new materials that are of a high quality and conforming to the industry standards of practice and are not in contravention of the codes or regulations of the appropriate municipal authority or any other authority having jurisdiction.

2.02 Prior to commencing any work in the Premises, the Tenant will provide the Landlord with detailed plans of its intended improvement work (consisting of applicable electrical, mechanical and architectural drawings, specifications and other appropriate information) for review and approval by the Landlord, acting reasonably. The Tenant will be responsible for all costs incurred by the Landlord in reviewing and approving such plans, including consultant fees. The Tenant may use the Landlord’s consultant with respect to the Tenant’s work.

2.03 The Tenant, at its expense, will revise its plans to address issues or required changes identified by the Landlord, acting reasonably, and resubmit the revised plans for final approval of the Landlord, acting reasonably. The Landlord’s approval of the Tenant’s plans denotes acceptance of the information contained in the drawings and specifications provided and approval of the visual design that the drawings appear to represent. The Landlord’s approval does not mean confirmation of dimensions shown on the drawings nor does it limit the responsibilities of the Tenant to those shown on the drawings and specifications. The Tenant will be responsible for all work required to prepare the Premises for their intended and permitted use under the Lease and sigh criteria, codes, regulations and laws of governing authorities having jurisdiction, whether or not this is completely shown on the Tenant’s drawings, notwithstanding the Landlord’s approval. The landlord is not responsible for the function and performance of the Tenant’s design, installation and construction.

2.04 It is the Tenants responsibility to obtain all necessary approvals and permits for its work from the appropriate municipal authority and all other authorities having jurisdiction and the Tenant must submit evidence of these approvals to the Landlord before commencing work. The Tenant is responsible for payment of all fees and charges incurred in obtaining said approvals and for obtaining, if required by the Municipality, an occupancy permit prior to commencing operations in the Premises.

2.05 Before commencing the Tenant's work, the Tenant is to provide written proof to the Landlord that liability, fire, general worker's compensation and any other insurance reasonably required by the Landlord has been effected and is in force to the limits and on the terms which the Landlord may reasonably approve. The Landlord shall be named at an additional insured and loss-payee in the Tenant's insurance for the Premises.

2.06 The Tenant indemnifies the Landlord from any and all claims arising out of work done by the Tenant or its contractors and the Tenant will promptly remove any liens filed against title to the Premises or the Land (as defined in the Lease) in connection therewith, failing which the Landlord may do so and the Tenant will pay all the Landlord's costs, including legal costs, as incurred by the Landlord.

2.07 The Landlord is not responsible or liable for any materials left or installed in the Premises or for any loss or damage suffered by the Tenant, its contractor or subcontractors. The Tenant is entirely responsible for the security of the Premises and the security of its contractor's supplies and equipment. No security for the Premises will be installed unless prior written approval is obtained from the Landlord.

2.08 The Tenant acknowledges, and agrees that:

(a) the Landlord is not in any way responsible or liable with regard to any Tenant's Work (as defined in the Lease) carried out in the Premises;

(b) any damage caused by the Tenant, its contractor or subcontractors employed on the Tenant's Work to any work of the structure or the systems employed in the Building or to any property of the Landlord or of other tenants or owners in the Building is to be repaired by the Landlord's contractor to the satisfaction of the Landlord and the Landlord may recover the costs incurred from the Tenant; and

(c) under no circumstances shall the Tenant or its contractor at any time be permitted to drill or cut conduit, pipe sleeves, chases, duct equipment, openings in the floor, columns, walls or ceiling of the Building; any work of this type required by the Tenant Shall be subject to the Landlord's approval, pot to be, unreasonably withheld or delayed.

ARTICLE 3
WORK DONE BY THE LANDLORD FOR THE TENANT

3.01 Any equipment or work (excepting any Landlord's Work, as defined in the Lease) provided by the Landlord for or at the request of the Tenant, is to be paid for by the Tenant as follows:

(a) one hundred percent (100%) of the amount payable will be paid at the time the Tenant requests the equipment to be supplied or the work to be done; and

(b) the cost of such equipment or work includes, without limitation, labour, materials, applicable taxes, all architectural, engineering and contractor's fees in connection thereof, and all reasonable fees for supervision of such work as the Landlord may charge.

ARTICLE 4
ALLOWANCE

4.01 The Landlord agrees to pay to the Tenant the Allowance payable within ten (10) days after the completion of all of the following:

(a) execution and delivery of the Lease Amending Agreement by the Tenant to the Landlord as well as full compliance by the Tenant with all Tenant obligations of the Lease;

(b) the Extension Term Commencement Date has passed;

(c) receipt of notice from the Tenant that it has completed the Tenant's Work contemplated in the Lease Amending Agreement;

(d) the applicable statutory lien holdback period shall have expired and any liens that may have been filed against the Premises or the property with respect to the work done by or on behalf, of the Tenant with respect to the Premises shall have been discharged from title to the property; and

(e) receipt by the Landlord of:

  (i) a copy of the Tenant's final Inspection Permit for the Tenant's Work within the Premises and a copy of the Tenant's business license, if required;

  (ii) an officer's certificate or a statutory declaration by a principal of the Tenant of payment in full of all costs relating to the Tenant's Work;

  (iii) copies of receipted invoices for the Tenant's Work substantiating the amount that has been expended and paid for by the Tenant;

  (iv) a letter from the Workers' Compensation Board of B.C. ("WorkSafeBC") confirming that the Tenant and its general contractor have satisfied all assessment requirements of the WorkSafeBC to the date which is thirty (30) days following the date of substantial completion of the Tenant's Work; and

  (v) a copy of the certificate of completion signed by the payment certifier in respect of the Tenant's Work, or if a payment certifier is not available, certificate of Substantial Completion from the Tenant's contractor.

ARTICLE 5
NON-COMPLIANCE

5.01 If the Tenant does not comply with the provisions of the Lease or any other agreement relative to the construction or occupation of the Premises, including this Agreement, the Landlord, in addition to and not in lieu of any other rights or remedies, has the right to any and all of the following in its discretion:

(a) to declare all fees, charges and other sums payable by the Tenant to the Landlord pursuant to this Agreement to be rent and to be collectible as rent under the provisions of the Lease; or

(b) to declare and treat the Tenant's non-compliance as a default or breach of Covenant under the Lease and exercise any right available under the provisions of the Lease, including the right of termination.

5.02 In any event of termination pursuant to the above provisions, the Landlord may further elect either to retain for its own use and without payment of, all or any of the Tenant's Work which has been commenced, installed or completed to the date of termination or immediately demolish or remove all or any work and restore the Premises to the condition it was prior to the commencement of the Tenant's Work, the cost which is payable by the Tenant.

ARTICLE 6
GENERAL

6.01 This Schedule shall survive, and neither shall merge upon, the execution and delivery of the other such document. The parties acknowledge and agree that the terms of this Agreement are intended to supplement and co-exist with the terms of the Lease, notwithstanding any contrary term of the Lease.

IN WITNESS WHEREOF the parties have executed this Agreement as of the date set out above.

The Landlord:

CONCERT REAL ESTATE CORPORATION

Per

/s/ Authorized Signatory
(Authorized Signatory)

Per

/s/ Authorized Signatory
(Authorized Signatory)

The Tenant:

XENON PHARMACEUTICALS INC.

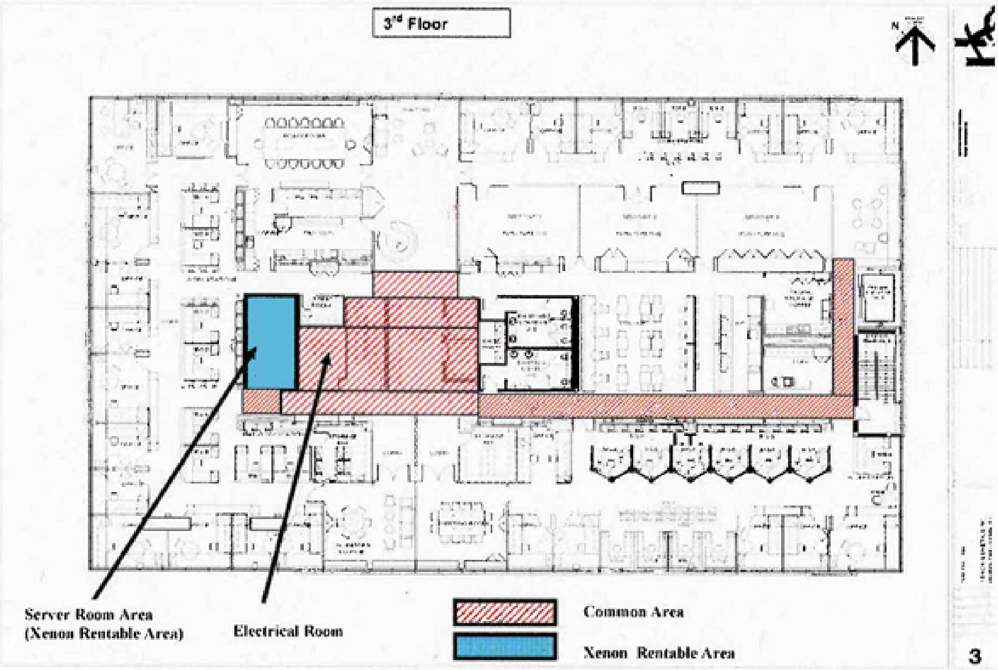
Per

/s/ Simon Pimstone
(Authorized Signatory)

Per

(Authorized Signatory)

SCHEDULE E
SERVER ROOM AREA



** The area hatched in red above indicates the approximate location of the Common Areas.**

LEASE MODIFICATION AGREEMENT

This Agreement made on the **18th day of July, 2013** and made effective as of the **1st day of April**, **2012** (the "Effective Date").

BETWEEN:

CONCERT REAL ESTATE CORPORATION

(the "**Landlord**")

AND:

XENON PHARMACEUTICALS INC.

(the "**Tenant**")

WHEREAS:

A. By a lease made in 2001 (the "**Original Lease**") between Discovery Parks Incorporated (the "**Original Landlord**") and Xenon Genetics Inc. (the "**Original Tenant**"), the Original Tenant leased certain premises (the "**Original Premises**") comprising the whole of the building (the "**Building**") located on property known as 3650 Gilmore Way, Burnaby, British Columbia, as more particularly described in the Original Lease for a term of ten (10) years expiring on April 14, 2011;

B. The Landlord is the successor in interest to the Original Landlord;

C. The Tenant is the successor in interest to the Original Tenant;

D. By a lease extension and modification agreement made effective November 8, 2010 (the "**First Modification**") between the Landlord and Tenant, the Landlord and the Tenant agreed to extend the term of the Original Lease for an additional four (4) months and sixteen (16) days, for a term expiring on August 31, 2011, as further described in the First Modification;

E. By a lease extension and modification agreement made effective February 7, 2011 (the "**Second Modification**") between the Landlord and Tenant, the Landlord and the Tenant agreed to extend the term of the Original Lease for an additional four (4) months, for a term expiring on December 31, 2011, as further described in the Second Modification;

F. By a lease extension and modification agreement made effective June 1, 2011 (the "**Third Modification**") between the Landlord and Tenant, the Landlord and the Tenant agreed to extend the term of the Original Lease for an additional three (3) months, for a term expiring on March 31, 2012, as further described in the Third Modification;

G. By an Offer to Lease (the "**Original Offer**") accepted by the Landlord on November 9, 2010 and accepted by the Tenant on November 23, 2010, the Landlord and Tenant agreed that the Tenant would continue to lease a portion (the "**Proposed New Premises**", being the whole of the 1st and 2nd floors of the Building) of the Original Premises, as more particularly described in the Offer, for a term of 120 months commencing on September 1, 2011, on the terms and conditions set out in the Original Offer;

H. By an Addendum/Amendment (the "**First Addendum**") dated for reference February 7, 2011, the Original Offer was amended as set out therein;

I. By an Addendum/Amendment (the "**Second Addendum**") dated for reference June 1, 2011, the Original Offer, as amended, was further amended as set out therein;

J. By an Addendum/Amendment (the "**Third Addendum**") dated for reference August 31, 2011, the Original Offer, as amended, was further amended as set out therein, including adding a right for the Tenant to elect to surrender and terminate its rights under the Original Offer in respect of that portion (the "**Surrender Area**") of the Proposed New Premises shown on the plan attached to the Third Addendum as Exhibit A;

K. By an Addendum/Amendment (the "**Fourth Addendum**") dated for reference September 30, 2011, the Original Offer, as amended, was further amended by replacing the plan of the Surrender Area attached to the Third Addendum as Exhibit A with the plan attached as Exhibit A to the Fourth Addendum;

L. By a letter (the "**Surrender Letter**") dated September 30, 2011, the Tenant notified the Landlord that the Tenant was exercising its right to surrender and terminate its rights under the Original Offer in respect of the Surrender Area;

M. The Original Offer, as amended by the First Addendum, Second Addendum, Third Addendum, Fourth Addendum, the Surrender Letter, Addendum #5 dated October 19, 2011, Addendum #6 dated October 28, 2011, Addendum #7 dated November 9, 2011, Addendum #8 dated November 25, 2011, and Addendum #9 dated November 29, 2011, and the , is herein referred to as the "**Offer**" and the Proposed New Premises, excluding the Surrender Area but Including the IT Room (as defined below) are referred to as the "**Premises**";

N. By a lease extension and modification agreement made as of October 27, 2011 (the "**Fourth Modification**") between the Landlord and Tenant, the Landlord and the Tenant agreed to extend the term of the Original Lease for an additional ten (10) years, for a term expiring on March 31, 2022 on the terms and conditions therein, as further described in the Fourth Modification (the Original Lease as modified by the First Modification, the Second Modification, the Third Modification and the Fourth Modification is referred to herein as the "**Lease**");

O. The Landlord and the Tenant acknowledge and agree that the recitals hereto are true and incontrovertible;

P. The Landlord and the Tenant have agreed to amend the Lease on the terms set out herein.

THEREFORE in consideration of the premises, the mutual covenants and agreements contained herein and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by each of the parties hereto, the parties agree as follows:

1. For the purposes of this Agreement and unless there is a definition specifically herein contained, any words, terms or phrases that are defined in the Lease shall have the same meaning herein.

2. The Landlord and the Tenant acknowledge and agree that the Landlord has obtained the First Measurement for the Premises.

3. The Landlord and the Tenant further acknowledge and agree that the Landlord has obtained the Second Measurement, which illustrates the final Actual Rentable Area of the Premises.

4. Effective on the Effective Date, the Landlord and the Tenant agree that all rental payments in the Lease shall be adjusted in accordance with this Lease Modification Agreement.

5. The Landlord and the Tenant agree to delete Clause 2 (a) of the Fourth Modification and replace it with the following:

"(a) In section 1.1, the phrase "Rentable Area of approximately 56,776 square feet, being the entire Building situated thereon, as set out in Schedule "A" attached hereto" is deleted and replaced with "Rentable Area of **30,600** square feet, being **a portion of the first floor (Unit 120), the entire second floor (Unit 200) and a portion of the third floor ("IT Room" and "Unit 200")** of the Building situated thereon, as set out in Schedule "A" and Schedule "E" attached hereto, and includes the Tenant's Proportionate Share of Common Areas as per section 3.3 below. For avoidance of doubt, the areas designated as "Vertical Penetrations Areas" in Schedule "A" and Schedule "E" are not included in the "Second Measurement" calculation underlying the above-noted Rentable Area and the Basic Rent set forth in Section 3.1 below.";

6. The Landlord and the Tenant agree to delete Clause 2 (c) (ii) of the Fourth Modification and replace it with the following:

"Period	**Per Square Foot**	**Approximate Basic Rent Per Annum**	**Approximate Basic Rent Per Month**
April 15, 2011 - March 31, 2012	$ 19.50	$1,107,132.00	$ 92,261.00
April 1, 2012 - March 31, 2017	$ 19.50	**$ 596,700.00**	**$ 49,725.00**
April 1, 2017 - March 31, 2022	$ 19.50	**$ 642,600.00**	**$ 53,550.00**

The Tenant shall have a Free Basic Rent Period from April 1, 2012 through to August 15, 2012. During this period, the Tenant shall pay to the Landlord its Proportionate Share of Operating Expenses and property taxes and abide by all other terms of the Lease.";

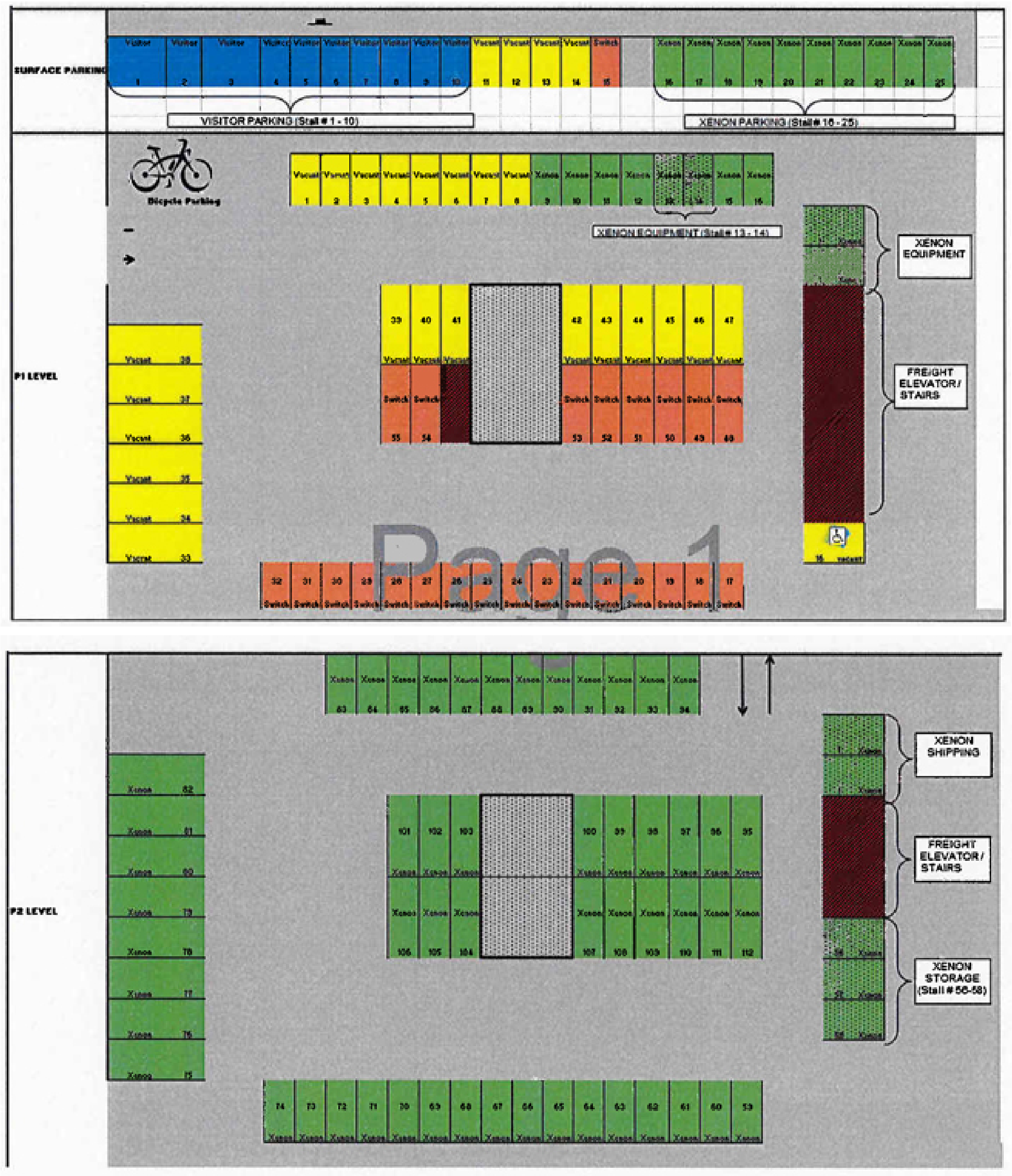
7. The Landlord and the Tenant agree to delete Article 36 of the Lease and replace it with the following:

36.0 PARKING

36.1 The Tenant shall be provided **seventy (70) designed** parking stalls free of any monthly parking charge for the balance of the Term from April 1, 2012 and any renewals thereof **as shown on the parking plan below**. The Tenant may designate underground parking spaces allocated to it for use as storage areas or other uses and may fence these off or construct demising walls, subject to the

Landlord's approval (such approval not to be unreasonably withheld) and compliance with building codes, and subject to not impeding access to the balance of the parking stalls. The Tenant covenants that all fencing or demised walls for such storage areas shall be removed at the Tenant's sole cost and expense prior to the Lease expiry and all damages caused by such removal shall be repaired by the Tenant at its sole cost and expense.

Parking Plan



8. The Landlord and the Tenant agree that Schedule "A" of the Lease is deleted and replaced with Schedule "A" attached hereto.

9. The Landlord and the Tenant hereby confirm that the **Landlord's Work** in Schedule "B" of the **Fourth Modification** has been completed and satisfied.

10. The Landlord and the Tenant hereby confirm that, as of the date of this Agreement, pursuant to the Tenant Work Agreement attached as Schedule "D" of the Fourth Modification, the Tenant has conducted certain Tenant's Leasehold Improvements comprising Tenant's Work under the Lease ("**2012/2013 Leasehold Improvements**"). For avoidance of doubt, in keeping with the Landlord and the Tenant's mutual intention and understanding as set out under the first sentence of paragraph 2 of Section 5 of the Fourth Modification, and notwithstanding anything to the contrary in Section 5 of the Fourth Modification or otherwise, the Landlord and the Tenant further confirm their agreement as follows:

(a) with respect to the 2012/2013 Leasehold Improvements, the Tenant has complied with Sections 2.01 to 2.05 (inclusive), and subsection 2.08(c) of the Tenant Work Agreement; **however, the Landlord and the Tenant agree and accept that the following items for the 2012/2013 Leasehold Improvements shall be submitted from the Tenant to the Landlord as a condition of the Allowance being paid**:

(i) "As built" drawings saved in PDF and AutoCAD format 2004 and submitted to the Landlord on a CD or via e-mail;

(ii) Mechanical drawings;

(iii) All Permits; and

(iv) All inspection reports;

(b) at the Tenant's discretion, as of the date of this Agreement, (subject to the Tenant having complied with the requirements of the Tenant Work Agreement, and specifically, having provided to the Landlord those items set forth under subsections 4.01 (c), (d), and (e) of such Tenant Work Agreement) the Tenant has the right to request that the Landlord pay to the Tenant (as the first installment contemplated under the first sentence of paragraph 2 of Section 5 of the Fourth Modification) up to the total of the amount of the Allowance that relates to the 2012/2013 Leasehold Improvements, and in the event the Tenant requests same, such first installment portion of the Allowance will be paid to the Tenant within ten (10) days of the Tenant's request for same;

(c) should the Tenant desire to delay its request for such first installment payment, until such later time and time that it has conducted additional Tenant's Leasehold Improvements comprising Tenant's Work, the Tenant has the right to do so, and at that time (provided that such additional Tenant's Leasehold Improvements (as well as the 2012/2013 Leasehold Improvements) are completed and satisfied in accordance with the terms set out in the Lease including those terms set out in the Tenant Work Agreement), the applicable first installment portion of the Allowance (relating to all such Tenant's Work conducted and completed as of that later date), will be paid to the Tenant within ten (10) days of the Tenant's request for same;

(d) the Tenant has the right to request that the Landlord pay to the Tenant the second installment payment, at any time over the course of the Extension Term following the date of the Tenant's request for its first installment payment, and in the event the Tenant requests such second installment payment, (provided that any Tenant's Leasehold Improvements that are the subject matter of that second installment payment are completed and satisfied in accordance with the terms set out in the Lease including those terms set out in the Tenant Work Agreement), such second installment portion of the Allowance will be paid to the Tenant within ten (10) days of the Tenant's request for same; and

(e) in the event that, the total amount of the Tenant's Work (as repaid by the Landlord to the Tenant under the first installment plus the second installment) is a sum lower than the total amount of the Allowance, the difference between the Allowance and the amount actually repaid to the Tenant by the Landlord, calculated in accordance with paragraph 1 of Section 5 of the Fourth Modification (the "**Difference**"), will be applied on account of the Basic Rent and Operating Expenses and Property Taxes otherwise owed to the Landlord by the Tenant. For the avoidance of doubt, if at the time that the Landlord and Tenant make the determination that the Difference is payable to the Tenant, the Extension Term has been completed and there is no more Basic Rent, Operating Expenses, or Property Taxes otherwise owed to the Landlord by the Tenant to which the Difference could be applied, in such event the Landlord will forthwith pay the Difference to the Tenant in cash.

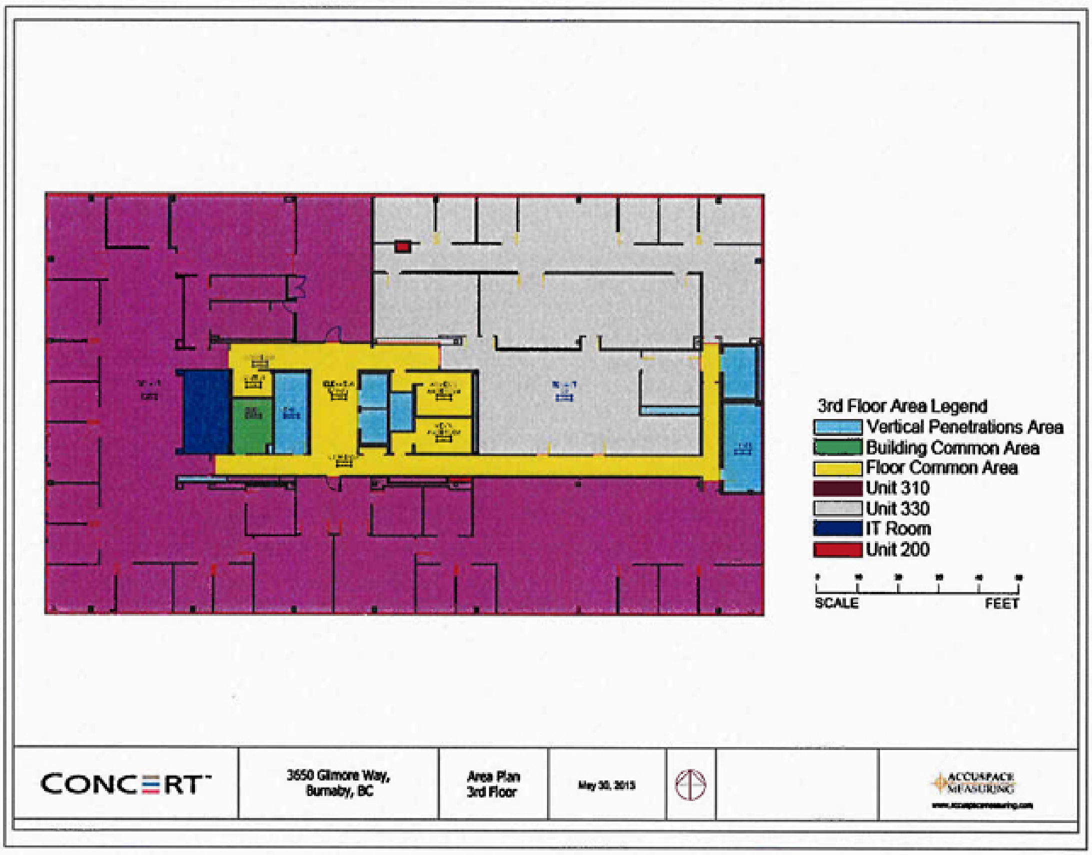
11. The parties confirm and ratify the terms and conditions contained in the Lease as amended by this Agreement.

12. This Agreement will, from the Effective Date, be read and construed together with the Lease, and the Lease, as amended hereby, shall continue in full force and effect for the remainder of the term of the Lease in accordance with the terms thereof and hereof.

13. This Agreement will enure to the benefit of and be binding upon the heirs, executors, administrators, successors and permitted assigns of the parties.

14. The Landlord and the Tenant agree to delete Schedule "E" of the Fourth Modification and replace it with the following:

SCHEDULE “E”
SERVER ROOM AREA (LABELED “IT ROOM”)



IN WITNESS WHEREOF the parties have executed this Agreement as of the date first above written.

CONCERT REAL ESTATE CORPORATION

By: /s/ Authorized Signatory
Authorized Signatory

By: /s/ Authorized Signatory
Authorized Signatory

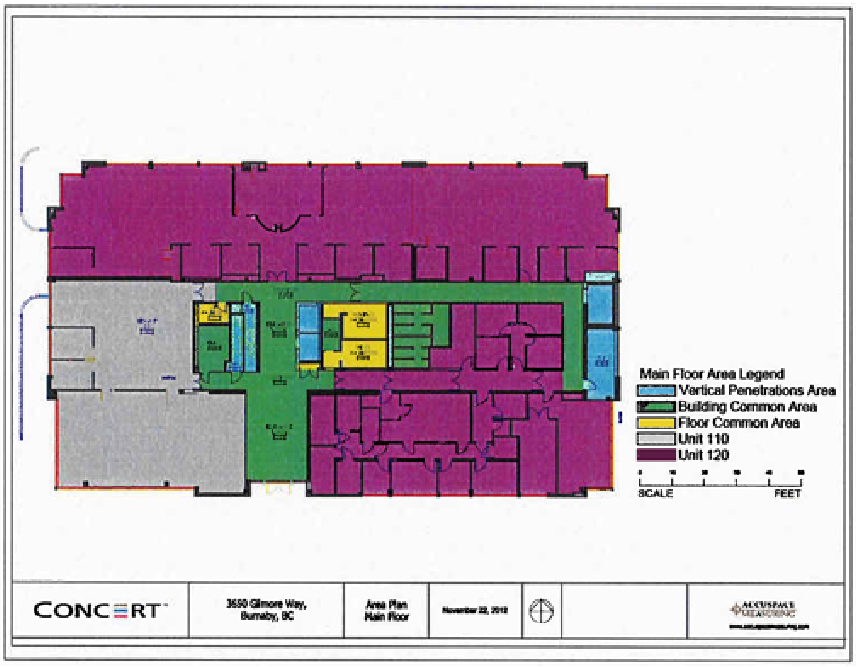
XENON PHARMACEUTICALS INC.

By: /s/ Simon Pimstone
Authorized Signatory

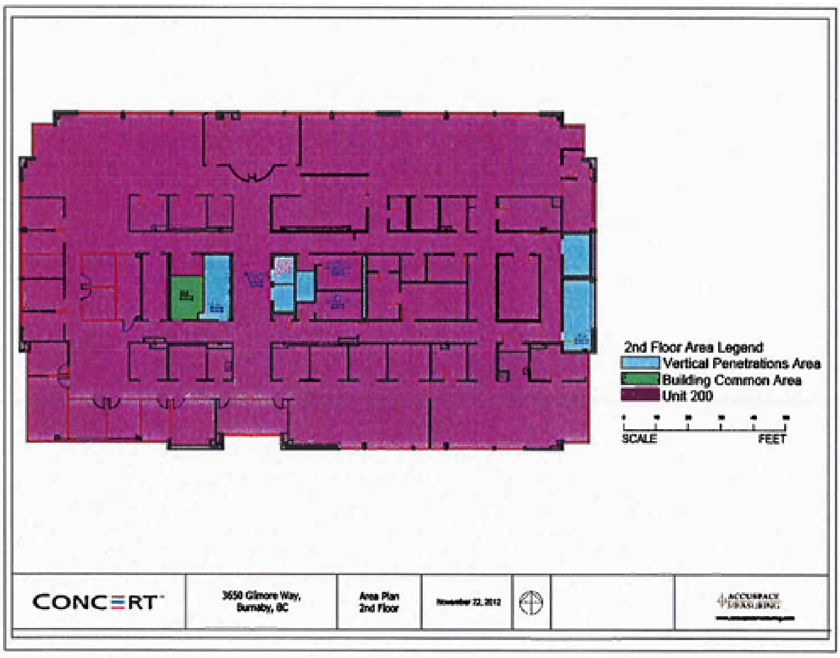
By: ____________________
Authorized Signatory

SCHEDULE “A”
PLAN

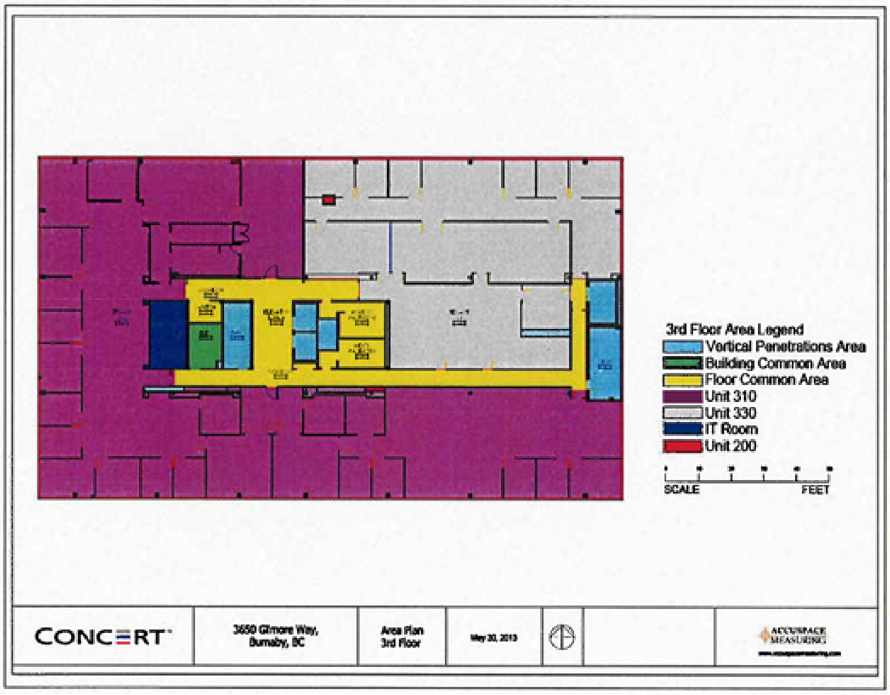
1st Floor — Unit 120



2nd Floor — Tenant is leading entire 2nd Floor



3rd Floor — Unit 200



END OF DOCUMENT

LEASE MODIFICATION AGREEMENT

This lease modification agreement (hereinafter referred to as this **"Agreement**" or the "**Sixth Modification**") is made on the **10th day of July, 2014** and made effective as of the **1st day of July, 2014** (the "**Effective Date**").

BETWEEN:

REDSTONE ENTERPRISES LTD.

(the "**Landlord**")

AND:

XENON PHARMACEUTICALS INC.

(the "**Tenant**")

WHEREAS:

A. By a lease made in 2001 (the "**Original Lease**") between Discovery Parks Incorporated (the "**Original Landlord**") and Xenon Genetics Inc. (the "**Original Tenant**"), the Original Tenant leased certain premises (the "**Original Premises**") comprising the whole of the building (the "**Building**") located on property known as 3650 Gilmore Way, Burnaby, British Columbia, as more particularly described in the Original Lease for a term of ten (10) years expiring on April 14, 2011;

B. Concert Real Estate Corporation (the "Previous Landlord") was the immediate successor in interest to the Original Landlord; the Landlord is the successor in interest to the Original Landlord and the Previous Landlord;

C. The Tenant is the successor in interest to the Original Tenant;

D. By a lease extension and modification agreement made effective November 8, 2010 (the "**First Modification**") between the Previous Landlord and Tenant, the Previous Landlord and the Tenant agreed to extend the term of the Original Lease for an additional four (4) months and sixteen (16) days, for a term expiring on August 31, 2011, as further described in the First Modification;

E. By a lease extension and modification agreement made effective February 7, 2011 (the "**Second Modification**") between the Previous Landlord and Tenant, the Previous Landlord and the Tenant agreed to extend the term of the Original Lease for an additional four (4) months, for a term expiring on December 31, 2011, as further described in the Second Modification;

F. By a lease extension and modification agreement made effective June 1, 2011 (the "**Third Modification**") between the Previous Landlord and Tenant, the Previous Landlord and the Tenant agreed to extend the term of the Original Lease for an additional three (3) months, for a term expiring on March 31, 2012, as further described in the Third Modification;

G. By an Offer to Lease (the "**Original Offer**") accepted by the Previous Landlord on November 9, 2010 and accepted by the Tenant on November 23, 2010, the Previous Landlord and Tenant agreed that the Tenant would continue to lease a portion (the "**Proposed New Premises**", being the whole of the 1st and 2nd floors of the Building) of the Original Premises, as more particularly described in the Offer, for a term of 120 months commencing on September 1, 2011, on the terms and conditions set out in the Original Offer;

H. By an Addendum/Amendment (the "**First Addendum**") dated for reference February 7, 2011, the Original Offer was amended as set out therein;

I. By an Addendum/Amendment (the "**Second Addendum**") dated for reference June 1, 2011, the Original Offer, as amended, was further amended as set out therein;

J. By an Addendum/Amendment (the "**Third Addendum**") dated for reference August 31, 2011, the Original Offer, as amended, was further amended as set out therein, including adding a right for the Tenant to elect to surrender and terminate its rights under the Original Offer in respect of that portion (the "**Surrender Area**") of the Proposed New Premises shown on the plan attached to the Third Addendum as Exhibit A;

K. By an Addendum/Amendment (the "**Fourth Addendum**") dated for reference September 30, 2011, the Original Offer, as amended, was further amended by replacing the plan of the Surrender Area attached to the Third Addendum as Exhibit A with the plan attached as Exhibit A to the Fourth Addendum;

L. By a letter (the "**Surrender Letter**") dated September 30, 2011, the Tenant notified the Previous Landlord that the Tenant was exercising its right to surrender and terminate its rights under the Original Offer in respect of the Surrender Area;

M. The Original Offer, as amended by the First Addendum, Second Addendum, Third Addendum, Fourth Addendum, the Surrender Letter, Addendum #5 dated October 19, 2011, Addendum #6 dated October 28, 2011, Addendum #7 dated November 9, 2011, Addendum #8 dated November 25, 2011, and Addendum #9 dated November 29, 2011 is herein referred to as the "**Offer**" and the Proposed New Premises, excluding the Surrender Area but including the IT Room (as defined below) are referred to as the "**Premises**";

N. By a ease extension and modification agreement made as of October 27, 2011 (the "**Fourth Modification**") as amended by a lease modification agreement made as of April 1, 2012 (the "**Fifth Modification**") each between the Previous Landlord and Tenant, the Previous Landlord and the Tenant agreed to extend the term of the Original Lease for an additional ten (10) years, for a term expiring on March 31, 2022 on the terms and conditions therein, as further described in the Fourth Modification and Fifth Modification (the Original Lease as modified by the First Modification, the Second Modification, the Third Modification, the Fourth Modification, and the Fifth Modification is referred to herein as the "**Lease**");

O. The Landlord is the successor in interest to the Original Landlord and the Previous Landlord;

P. The Landlord and the Tenant acknowledge and agree that the recitals hereto are true and incontrovertible;

Q. The Landlord and the Tenant have agreed to amend the Lease on the terms set out herein.

THEREFORE in consideration of the premises, the mutual covenants and agreements contained herein and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by each of the parties hereto, the parties agree as follows:

1. For the purposes of this Agreement and unless there is a definition specifically herein contained, any words, terms or phrases that are defined in the Lease shall have the same meaning herein.

2. Effective on the Effective Date, the Landlord and the Tenant agree that the Rentable Area and all payments related thereto in the Lease shall be adjusted in accordance with this Agreement.

3. As of the Effective Date, the Landlord and the Tenant agree to delete Clause 5 of the Fifth Modification and replace it with the following:

"The Landlord and the Tenant agree to delete Clause 2(a) of the Fourth Modification and replace it with the following:

(a) In section 1.1, the phrase "Rentable Area of approximately 56,776 square feet, being the entire Building situated thereon, as set out in Schedule "A" attached hereto" is deleted and replaced with "Rentable Area of approximately **33,600** square feet, subject to confirmation pursuant to section 3.3 below, being **a portion of the first floor (Unit 120), the entire second floor (Unit 200) and a portion of the third floor ("IT Room" and "Unit 200" and the portion of Unit 310 referenced as "Unit 310A")** of the Building situated thereon, each as set out in Schedule "A" attached hereto, and includes the Tenant's Proportionate Share of Common Areas as per section 3.3 below. For avoidance of doubt, the areas designated as "Vertical Penetrations Areas" in Schedule "A" and Schedule "E" are not included in the "Second Measurement" calculation underlying the above-noted Rentable Area and the Basic Rent set forth in Section 3.1 below.";

4. As of the Effective Date, the Landlord and the Tenant agree to delete Clause 6 of the Fifth Modification and replace it with the following:

"The Landlord and the Tenant agree to delete Clause 2 (c) (ii) of the Fourth Modification and replace it with the following:

The following is added at the bottom of the table set out therein:

Period	**Per Square Foot**	**Approximate Basic Rent Per Annum**	**Approximate Basic Rent Per Month**
April 15, 2011 – March 31, 2012	$ 19.50	$1,107,132.00	$ 92,261.00
April 1, 2012 – June 30, 2014	$ 19.50	**$ 596,700.00**	**$ 49,725.00**
July 1, 2014 – March 31, 2017	$ 19.50	**$ 655,200.00**	**$ 54,600.00**
April 1, 2017 – March 31, 2022	$ 21.00	**$ 705,600.00**	**$ 58,800.00**

The Tenant shall have a Free Basic Rent Period from April 1, 2012 through to August 15, 2012. During this period, the Tenant shall pay to the Landlord its Proportionate Share of Operating Expenses and property taxes and abide by all other terms of the Lease.";

5. The Landlord and the Tenant agree to delete Clause 2 (c) (i) of the Fourth Modification and replace it with the following:

"(i). The address of the Landlord is deleted and replaced with "2011 - 7495 132nd Street, Surrey, BC V3W 1J8 (Tel: 604-596-5622, Fax: 604-596-5204)"."

6. The Landlord and the Tenant have together measured and determined the Actual Rentable Area of the Premises as of the Effective Date and as referenced in clause 3 above , in accordance with the BOMA Standard, and agree that the Actual Rentable Area of the portion of Unit 310 referenced as Unit 310A that the Tenant is occupying as of the Effective Date totals 3,000 square feet.

   In the event that, at the end of the four (4) month period referenced in clause 9 below, the Tenant does not lease any of the contiguous space therein referenced, and if the aforementioned designated individuals are then unable to agree upon the exact location of the dividing wall that would then need to be erected in order to separate and secure Unit 310A from the remainder of the 3rd floor space, the Landlord, at its cost, will then make arrangements for a measurement of the Premises to be conducted in accordance with the BOMA Standard by an independent third party who is qualified to make such BOMA Standard measurements, and such independent third party will measure and provide advice as to the appropriate location of such dividing wall so as to ensure that Unit 310A comprises 3,000 square feet, and (unless the parties at that time mutually agree otherwise in writing), the determination of such independent third party shall be deemed to be the final determination respecting the proper placement of the dividing wall that would separate and secure Unit 310A from the other space within Unit 310 that is contiguous to Unit 310A.

7. For clarity, the Landlord and the Tenant confirm and agree that, the Allowance referenced in clause 5 of the Fourth Modification is applicable to any Tenant's Leasehold Improvements that the Tenant may make to any portion of the Premises that comprises the Rentable Area as of the Effective Date. For avoidance of doubt, the Landlord and the Tenant confirm and agree that no additional Allowance amount shall be payable by the Landlord as a result of the increase in the Rentable Area (as of July 1, 2014) that is attributable to Unit 310A.

8. The Landlord acknowledges and agrees that, notwithstanding anything to the contrary in the Lease, as of the Effective Date, with respect to the third (3rd) floor of the Building, Section 8.4 of the Lease shall be interpreted to apply only to those business and trade fixtures, machinery and equipment, cabinet work, furniture and moveable and immovable partitions owned or installed by the Tenant after the Effective Date.

9. The Landlord confirms and agrees that, for the four (4) month period between the Effective Date and November 1, 2014, the Landlord will not lease to any other party (other than the Tenant), any space within Unit 310 on the third (3rd) floor of the Building that is contiguous to Unit 310A. For the avoidance of doubt, the parties agree that such continguous space is that space within Unit 310 that is to the west of Unit 310A, and the Boardroom that is on the south-east corner of Unit 310A. The Tenant further confirms and agrees that, on or prior to November 1, 2014, the Tenant will advise the Landlord as to whether it desires to lease any additional space within Unit 310 on the third (3rd) floor of the Building, in which case, for any such additional space, section 33.1 of the Lease (as set forth in clause 2(t) of the Fourth Amendment) shall apply.

For clarity, the term “additional space” as used in this clause 9 above, means space within Unit 310 *other than* the space on the third (3rd) floor (namely, the IT Room, Unit 200 and Unit 310A) that is included in the Rentable Area as of the Effective Date.

10. The Landlord and the Tenant agree that Schedule “A” of the Lease is deleted and replaced with Schedule “A” attached hereto.

11. The parties confirm and ratify the terms and conditions contained in the Lease as amended by this Agreement.

12. This Agreement will, from the Effective Date, be read and construed together with the Lease, and the Lease, as amended hereby, shall continue in full force and effect for the remainder of the term of the Lease in accordance with the terms thereof and hereof.

13. This Agreement will enure to the benefit of and be binding upon the heirs, executors, administrators, successors and permitted assigns of the parties.

IN WITNESS WHEREOF the parties have executed this Agreement as of the date first above written.

REDSTONE ENTERPRISES LTD.

By: ____________________________

Authorized Signatory

By: ____________________________

Authorized Signatory

XENON PHARMACEUTICALS INC.

By: ____________________________

Authorized Signatory

SCHEDULE "A"
PLAN

<u>1st Floor – Unit 120</u>

<u>2nd Floor – Tenant is leasing entire 2nd Floor</u>

<u>3rd Floor – IT Room, Unit 200, & Unit 310A</u>

- **The portion of** Unit 310 that is outlined in orange above, is **Unit 310A.**

END OF DOCUMENT

Exhibit 10.16

XENON PHARMACEUTICALS INC.

COMMON SHARE PUT AGREEMENT

March 19, 2014

XENON PHARMACEUTICALS INC.

COMMON SHARE PUT AGREEMENT

THIS COMMON SHARE PUT AGREEMENT (this "***Agreement***") is made and entered into as of March 19, 2014, by and between **XENON PHARMACEUTICALS INC.**, a corporation continued under the federal laws of Canada (the "***Company***"), and **ROCHE FINANCE LTD**, a **Swiss company** ("***Purchaser***").

RECITALS

WHEREAS, concurrent with the execution of this Agreement, the Company and Genentech, Inc., an affiliate of Purchaser, have entered into that certain Target Discovery Research Collaboration Agreement, dated the date hereof (the "***Collaboration Agreement***"); and

WHEREAS, the Company and the Purchaser have agreed that they will enter into this Common Share Put Agreement (the "***Agreement***") concurrently with the execution of the Collaboration Agreement whereby the Company will have the right to require the Purchaser to purchase certain of its common shares without par value ("***Common Shares***") for an aggregate purchase price of up to US$5 million on the terms and conditions set forth herein.

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing recitals and the mutual promises, representations, warranties, and covenants hereinafter set forth and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

1. **RIGHT TO REQUIRE PURCHASER TO PURCHASE COMMON SHARES**.

1.1 **Right To Require Purchase of Common Shares**. In the event that the Company sends a written notice to the Purchaser on or before December 31, 2014(the "**Put Notice**") notifying the Purchaser, in good faith, that the Company expects within 30 days from the date of the Put Notice to consummate an initial public offering of its Common Shares pursuant to an effective registration statement under the Securities Act of 1933, as amended (the "***Securities Act***"), pursuant to which the Company will receive aggregate gross proceeds of at least US $40 million (including the proceeds to be received from the sale and purchase of Common Shares under the Put Notice) and pursuant to which all of the Company's outstanding redeemable convertible preferred shares (the "***Preferred Shares***") convert to Common Shares of the Company (a "***Triggering IPO***"), then the Purchaser will be obligated to and will purchase, subject to the terms and conditions set forth in this Agreement, in a concurrent private placement a number of Common Shares (the "**Shares**") equal to the lesser of:

(a) the number of Common Shares that is equal to the quotient obtained by dividing US$5 million (the "***Committed Investment Amount***") by a price equal to the per share offer price of the Common Shares in the Triggering IPO ("**IPO Price**"); and

(b) the number of Common Shares that, after giving effect to the conversion of any Preferred Shares, common shares or other shares that may be convertible at the time of the Closing, will result in the Purchaser together with its affiliates, beneficially owning no more than 4.99% of the outstanding Common Shares (for clarification, including the Shares) or the voting power of the Company (the "***Ownership Maximum***") after the Closing (as defined below).

For clarification purpose, as long as the Company has provided the Put Notice that it expects within 30 days from the date of the Put Notice to consummate a Triggering IPO, the Purchaser will be obligated to purchase the Shares on the Closing Date (as defined below) even though the Triggering IPO is not completed as expected within 30 days of the date of the Put Notice, provided that the Triggering IPO is completed on or before December 31, 2014.

1.2 **Private Placement**. This Agreement, as well as the sale and purchase of the Shares, will be done by way of a private placement exempt from the registration requirements of the Securities Act and applicable laws, regulations, rules, and policies in United States, applicable state law (collectively, "US Laws") and applicable securities laws, regulations, rules, and policies in British Columbia Canada ("**BC Securities Laws**").

1.3 **Closing Date**. The closing of the purchase of the Shares will be held concurrently with the closing of the Triggering IPO, which must occur on or before December 31, 2014 (the "***Closing***"). The Closing, if any, will take place concurrently with the date and time set for the closing of the Triggering IPO at a place within North America as the Company specified in a written notice to the Purchaser at least 3 Business Days before Closing (the date of such closing is hereinafter referred to as the "***Closing Date***"). At the Closing, subject to the terms and conditions set forth in this Agreement and in consideration of the payment by Purchaser of the aggregate purchase price equal to the product of the IPO Price and the number of Shares as determined above, the Company will deliver to Purchaser a certificate representing the Shares.

1.4 **No Obligation to Sell if No Put Notice Delivered**. For clarification purpose, the Company will have no obligation to sell and the Purchaser will have no obligation to purchase any Common Shares if the Company does not deliver a Put Notice to the Purchaser and nothing in this Agreement shall be read to confer any right or entitlement on the Purchaser to obligate the Company to sell any Common Shares to it unless and until a Put Notice is delivered by the Company to the Purchaser.

2. **REPRESENTATIONS AND WARRANTIES OF THE COMPANY**.

Except as set forth on a Schedule of Exceptions delivered by the Company to Purchaser on the date of this Agreement, and an update to such Schedule of Exceptions delivered by the Company at the Closing, the Company hereby represents and warrants to Purchaser as of the date of this

Agreement and as of the Closing Date as set forth below; *provided*, *however*, that the representations and warranties of the Company included herein shall be deemed to be updated and modified by information included in the registration statement relating to the Triggering IPO as of its effective date, and any modification or amendment thereto prior to the Closing, a copy of which shall have been made available to Purchaser via the Securities and Exchange Commission's EDGAR website prior to the Closing and on which Purchaser shall be entitled to rely. The Schedule of Exceptions shall be arranged in sections corresponding to the numbered and lettered sections and subsections contained in this Section 2, and the disclosures in any section or subsection of the Schedule of Exceptions shall qualify other sections and subsections in this Section 2 where such disclosure would be appropriate. The Company will deliver to the Purchaser the initial Schedule of Exceptions on the date of signing of this Agreement and an updated and revised version of the Schedule of Exceptions on the Closing Date and the following representations and warranties shall only be read subject to and together with such Schedules of Exceptions delivered. All references to the knowledge of the Company or the Company's knowledge or belief shall mean actual knowledge or belief (as the case maybe) of the Chief Executive Officer, Chief Financial Officer and General Counsel of the Company.

2.1 **Organization, Good Standing and Qualification**. The Company has been duly continued and is validly existing as a corporation in good standing under the Canada Business Corporations Act. The Company has all requisite corporate power and authority to own and operate its properties and assets, to execute and deliver this Agreement, to issue and sell the Shares, and to carry out the provisions of this Agreement and to carry on its business as presently conducted. The Company is duly qualified to transact business and is in good standing in all jurisdictions in which the nature of its activities and of its properties (both owned and leased) makes such qualification necessary, except for those jurisdictions in which failure to do so would not reasonably be expected to have a material adverse effect on the Company's financial condition or its business as now conducted (a "***Material Adverse Effect***").

2.2 **Subsidiaries**. The Company does not own or control, directly or indirectly, any equity security or other interest of any other corporation, partnership, limited liability company, association, trust, joint venture or other business entity. The Company is not a participant in any joint venture, partnership, limited liability company or similar arrangement.

2.3 **Capitalization; Voting Rights**.

(a) Section 2.3 of the Schedule of Exceptions sets forth (i) the number of authorized and outstanding Common Shares and (ii) the number of authorized and outstanding Preferred Shares, in each case as of the date of this Agreement (with an update to be provided prior to the Closing with such information as of immediately prior to the Closing).

(b) Section 2.3 of the Schedule of Exceptions sets forth, in each case as of the date of this Agreement under the Company's Amended and Restated Stock Option Plan (the "***Plan***") (i) the number of options to purchase Common Shares that have been granted and are outstanding, and (ii) the number of Common Shares that remain available for future issuance to officers, directors, employees and consultants of the Company (with an update to be provided prior to the Closing with such information as of immediately prior to the Closing).

(c) Section 2.3 of the Schedule of Exceptions sets forth the capitalization of the Company as of the date of this Agreement including the number of shares of the following: (i) the authorized, issued and outstanding Common Shares; (ii) the Common Shares underlying issued and outstanding stock options; (iii) the Common Shares reserved for future issuance under the Plan (and the Company will include in the Schedule of Exceptions to be delivered at Closing the number of Common Shares reserved for future issuance under a new plan expected to be adopted on or before the Triggering IPO); (iv) issued and outstanding Preferred Shares; (v) the Common Shares reserved for future issuance upon conversion of issued and outstanding Preferred Shares; and (vi) the Common Shares underlying issued and outstanding warrants or share purchase rights, if any (with an update to be provided prior to the Closing with such information as of immediately prior to the Closing). Other than as set forth in Section 2.3 of the Schedule of Exceptions and except as may be granted pursuant to this Agreement, there are no, and at the time of the Closing there will not be any, outstanding options, warrants, rights (including conversion or preemptive rights or rights of participation, first refusal or similar rights), proxy, shareholder or investor rights agreements, or agreements of any kind, orally or in writing, for the purchase or acquisition from the Company of any of its securities. All applicable preemptive rights have been complied with or properly waived with respect to all prior issuances of capital stock.

(d) All issued and outstanding voting shares of the Company have been duly authorized and validly issued and are fully paid and non-assessable.

(e) The consummation of the transactions contemplated hereunder will not result in any anti-dilution adjustment or other similar adjustment to any outstanding shares of the Company other than pursuant to the provisions set out in the Articles of Continuance of the Company, as amended from time to time (the "**Articles**"). When and if issued in compliance with the provisions of this Agreement, the Shares will be validly issued, fully paid and non-assessable, and will be free of any liens, restrictions or other encumbrances other than (i) liens and encumbrances created by or imposed upon Purchaser, (ii) restrictions set forth in this Agreement or the Company's Articles; *provided*, *however*, that the Shares may be subject to restrictions on transfer set forth in the Company's Amended and Restated Investor Rights Agreement dated December 6, 2006 (as amended from time to time and as and if existing at the time of Closing, the "**Investor Rights Agreement**") and under applicable laws as set forth herein or as otherwise required by such laws at the time a transfer is proposed. When and if the Put Option is delivered by the Company to the Purchaser, the sale of the Shares to Purchaser hereunder will not be subject to any preemptive rights or rights of first refusal that have not been properly waived or complied with.

2.4 **Authorization; Binding Obligations**. All corporate action on the part of the Company, its officers, directors and shareholders necessary for the authorization of this Agreement have been taken. This Agreement, when executed and delivered, will be a valid and binding obligation of the Company enforceable against the Company in accordance with its terms, except (a) as limited by applicable bankruptcy, insolvency, reorganization, moratorium or other laws of general application affecting enforcement of creditors' rights, and (b) as limited by general principles of equity that restrict the availability of equitable remedies.

2.5 **Financial Statements**. The Company has made available to Purchaser (a) its audited balance sheet as at December 31, 2012 and audited statement of income and cash flows for the twelve months ended December 31, 2012, and (b) its unaudited balance sheet as at September 30, 2013 (the "***Statement Date***") and unaudited statement of income and cash flows for the nine -month period ended on the Statement Date (collectively, the "***Financial Statements***"). The Financial Statements have been prepared in accordance with United States generally accepted accounting principles ("***GAAP***") applied on a consistent basis throughout the periods indicated, except as disclosed therein, and present fairly the financial condition and position of the Company as of December 31, 2012 and the Statement Date, respectively; *provided*, *however*, that the unaudited financial statements are subject to normal recurring year-end audit adjustments.

2.6 **Independent Auditor**. KPMG LLP, who have audited the Financial Statements (to the extent the Financial Statements are audited), is an independent registered public accounting firm as required by Regulation S-X under the Securities Act and the Public Company Accounting Oversight Board (United States).

2.7 **Liabilities**. The Company has no material liabilities and to its knowledge no material contingent liabilities, in each case of the type required to be disclosed in the liabilities column of a balance sheet prepared in accordance with GAAP, that are not disclosed in the Financial Statements, except current liabilities incurred in the ordinary course of business subsequent to the Statement Date that have not had a Material Adverse Effect.

2.8 **Obligations to Related Parties**. There are no obligations of the Company to officers, directors, shareholders or employees of the Company other than (a) for payment of salary for services rendered, (b) reimbursement for reasonable expenses incurred on behalf of the Company, (c) for other standard employee benefits made generally available to all employees (including option agreements outstanding under any option plan approved by the Board of Directors of the Company) and (d) pursuant to the agreements set forth in Section 2.8 of the Schedule of Exceptions. Except as set out in Section 2.8 of the Schedule of Exceptions, none of the officers, directors or, to the Company's knowledge, key employees of the Company or any members of their immediate families, is indebted to the Company or has any direct or indirect ownership interest in any firm or corporation with which the Company is affiliated or with which the Company has a business relationship, or any firm or corporation that competes with the Company, other than passive investments in publicly traded companies (representing less than one percent of such company) which may compete with the Company. Except as set out in Section 2.8 of the Schedule of Exceptions, no officer or director or, to the Company's knowledge, any member of their immediate families is, directly or indirectly, interested in any material contract with the Company (other than such contracts as relate to any such person's ownership of capital stock or other securities of the Company).

2.9 **Changes**. Except as set out in Section 2.9 of the Schedule of Exceptions, since the Statement Date, there has not been any:

(a) resignation or termination of any executive officer or key employee of the Company;

(b) damage, destruction or loss, whether or not covered by insurance, that has had a Material Adverse Effect;

(c) waiver by the Company of a valuable right or of a material debt owed to it;

(d) material change in any compensation arrangement or agreement with any employee, officer, director or shareholder of the Company;

(e) sale, lease, assignment or exclusive license or transfer of any patents, trademarks, copyrights, trade secrets or other intangible assets; or

(f) arrangement or commitment by the Company to do any of the acts described in subsection (a) through (e) above.

2.10 **Title to Properties and Tangible Assets; Liens, Etc**. The Company has good and marketable title to its properties and tangible assets and good title to its leasehold interests, in each case subject to no material mortgage, pledge, lien, lease, encumbrance or charge, other than (a) those resulting from taxes which have not yet become due and payable, (b) liens and encumbrances which do not materially detract from the value of the property subject thereto or have a Material Adverse Effect, (c) those in respect of pledges or deposits under workers' compensation laws or similar legislation and (d) those that have otherwise arisen in the ordinary course of business.

2.11 **Intellectual Property**.

(a) To the Company's knowledge (without having conducted any special investigation or patent search), the Company owns, holds or possesses, or can obtain on commercially reasonable terms, rights to use all patents, trade-marks, service marks, trade names, copyrights, trade secrets, and other similar proprietary rights (i) as are necessary to operate the business of the Company as presently conducted and (ii) the lack of which could reasonably be expected to have a Material Adverse Effect ((individual and collectively, "Company Intellectual Property"). To the Company's knowledge, the Company has not received any notice alleging infringement of the valid rights of others. There are no outstanding options, licenses or agreements of any kind relating to the Company Intellectual Property, nor is the Company bound by or a party to any options, licenses or agreements of any kind with respect to the Company Intellectual Property, except, in each case, for those options, licenses and agreements entered into by the Company in the ordinary course of its business such as agreements with its own employees or consultants, collaborative research and license agreements, service agreements, standard end user, object code, internal use software license and support/maintenance agreements, and licenses or agreements arising from the purchase of "off the shelf" or standard products.

(b) To the Company's knowledge, none of its key employees is obligated under any contract (including licenses, covenants or commitments of any nature) or other agreement, or subject to any judgment, decree or order of any court or administrative agency, that would materially interfere with his or her efforts to promote the interests of the Company or that would conflict with the Company's business as presently conducted. Each employee that has had access to the Company Intellectual Property has executed a confidentiality agreement with respect thereto and, to the knowledge of the Company, no such employee is in breach of any such confidentiality agreement. Each consultant that has had access to the Company Intellectual Property has entered into an agreement containing appropriate confidentiality and invention assignment provisions and, to the knowledge of the Company, no such consultant is in breach of any such confidentiality agreement. The Company does not believe that it is or will be necessary to utilize any works or inventions made by its employees or consultants prior to his or her employment or consultancy, as applicable.

2.12 **Compliance with Other Instruments**. The Company is not in violation or default of any term of its charter documents, each as amended, or to the Company's knowledge, in any material respect, of any provision of any mortgage, indenture, contract, lease, license, agreement, instrument, permit, purchase order or contract to which it is a party or by which it is bound or of any judgment, decree, order or writ other than any such violation that would not have a Material Adverse Effect. The execution, delivery, and performance of and compliance with this Agreement will not, with or without the passage of time or giving of notice, result in any such material violation, or be in material conflict with or constitute a material default under (or require a consent under) any such term or provision, or result in the creation of any material mortgage, pledge, lien, encumbrance or charge upon any of the properties or assets of the Company or the suspension, revocation, impairment, forfeiture or nonrenewal of any permit, license, authorization or approval applicable to the Company, its business or operations or any of its assets or properties.

2.13 **Litigation**. There is no claim, action, suit, proceeding, arbitration, complaint, charge or investigation pending before any court or governmental agency or, to the Company's knowledge, currently threatened in writing against the Company that would have a Material Adverse Effect, or result in any change in the current equity ownership of the Company or that questions the validity of this Agreement or the right of the Company to enter into such agreement, or to perform its obligations contemplated hereby.

2.14 **Tax Returns and Payments**. The Company has timely filed all tax returns (federal, provincial, local and foreign) required to be filed by it, except where the failure to do so would not have a Material Adverse Effect, and all such tax returns are correct and complete in all material respects. All taxes shown to be due and payable on such returns, any assessments imposed and, to the Company's knowledge, all other taxes due and payable by the Company on or before the Closing, have been timely paid or will be paid prior to the time they become delinquent. The Company has not been advised in writing (a) that any of its returns, federal, provincial or other, have been or are being audited or examined as of the date hereof or (b) of any deficiency in assessment or proposed judgment to the Company's federal, provincial or other taxes.

2.15 **Compliance with Laws; Permits**. To its knowledge, the Company is not in violation of any applicable statute, rule, regulation, order or restriction of any domestic or foreign government or any instrumentality or agency thereof in respect of the conduct of its business or the ownership of its properties, except where such violation would not have a Material Adverse Effect. No governmental orders, permissions, consents, approvals or authorizations are required to be obtained and no registrations or declarations are required to be filed in connection with the execution and delivery of this Agreement, except such as have been duly and validly obtained or filed, or with respect to any filings that must be made after the Closing, as will be filed in a timely manner. To the knowledge of the Company, the Company has all franchises, permits, licenses and any similar authority necessary for the conduct of its business as now being conducted by it, the lack of which would have a Material Adverse Effect.

2.16 **Environmental and Safety Laws**. To its knowledge, the Company is not in violation of any applicable statute, law or regulation relating to the environment or occupational health and safety, and to its knowledge, no material expenditures are or will be required in order to comply with any such existing statute, law or regulation.

2.17 **Offering Valid**. Assuming that the Put Notice is given and the accuracy of the representations and warranties of Purchaser contained in Section 3 hereof, the offer, sale and issuance of the Shares will be exempt from the registration requirements of the Securities Act and the BC Securities Laws.

2.18 **Listing**. Upon consummation of a Triggering IPO, the Common Shares shall, at the time of the Closing, be listed on the NASDAQ Stock Market ("***Nasdaq***").

3. **REPRESENTATIONS AND WARRANTIES OF PURCHASER**.

Purchaser hereby represents and warrants to the Company as of the date of this Agreement as follows (provided that such representations and warranties do not lessen or obviate the representations and warranties of the Company set forth in this Agreement):

3.1 **Requisite Power and Authority**. Purchaser has all necessary power and authority to execute and deliver this Agreement and to carry out its provisions. All action on Purchaser's part required for the lawful execution and delivery of this Agreement has been taken. Upon its execution and delivery, this Agreement will be a valid and binding obligation of Purchaser, enforceable in accordance with its terms, except (a) as limited by applicable bankruptcy, insolvency, reorganization, moratorium or other laws of general application affecting enforcement of creditors' rights, and (b) as limited by general principles of equity that restrict the availability of equitable remedies.

3.2 **Investment Representations**. Purchaser understands that the Shares have not been registered under the Securities Act and may not be offered, sold or otherwise transferred in the

United States in the absence of a registration statement in effect with respect to the Shares under the Securities Act or any exemption from such registration is available. Purchaser also understands that the Shares are being issued and sold to it in a transaction that is exempt from the registration requirement and the prospectus requirement under the BC Securities Laws as well as an exemption available pursuant to Regulation D promulgated under the Securities Act of 1933 (the “1933 Act”), or another applicable exemption under the 1933 Act, and the Shares will be subject to resale restrictions under National Instrument 45-102-Resale of Securities and may not be resold in Canada before the date that is four (4) months and one (1) day after the later of the (i) the Closing Date and (ii) the date the Company becomes a reporting issuer in any province or territory of Canada; provided however that this restriction shall not apply once the Company is listed in the United States. The Purchaser further understands that the Shares are being offered and sold pursuant to an exemption from registration contained in the Securities Act based upon Purchaser’s representations contained in this Agreement. Purchaser hereby represents and warrants as of the date of this Agreement and as of the Closing Date as follows:

(a) **Purchaser Bears Economic Risk**. Purchaser has substantial experience in evaluating and investing in private placement transactions of securities in companies similar to the Company so that it is capable of evaluating the merits and risks of its investment in the Company and has the capacity to protect its own interests. Purchaser acknowledges that the Shares are speculative investments which involve a substantial degree of risk. Purchaser must bear the economic risk of this investment indefinitely unless the Shares are registered pursuant to the Securities Act or the Company becomes a reporting issuer under BC Securities Laws and US Laws, or an exemption from registration is available. Purchaser also understands that there is no assurance that any exemption from registration under the Securities Act, US Laws or the BC Securities Laws will be available and that, even if available, such exemption may not allow Purchaser to transfer all or any portion of the Shares under the circumstances, in the amounts or at the times Purchaser might propose.

(b) **Consult Own Advisors**. The Purchaser acknowledges that the investment in the Shares may have tax and/or other consequences to the Purchaser under applicable laws, which the Purchaser is solely responsible for determining and in respect of which no assistance will be provided by the Company or its advisers, and the Purchaser has obtained or has waived any right to obtain its own legal and tax advice. The Purchaser will comply with all applicable securities laws (including but not limited to the US Laws and BC Securities Laws) concerning the purchase or any resale of the Shares and has consulted with its own legal advisers with respect to such compliance. The Purchaser has also obtained tax advice from its own tax advisor as it deems necessary.

(c) **Acquisition for Own Account**. Purchaser is acquiring the Shares as principal and for Purchaser’s own account for investment only, and not with a view towards their distribution and the Purchaser has no present intention of selling, granting any participation in, or otherwise distributing the Shares. Purchaser further represents that it does not have any contract, undertaking, agreement or arrangement with any person or entity to sell, transfer or grant participation to such person or entity or to any third person or entity with respect to any of the Shares.

(d) **Purchaser Can Protect Its Interest**. Purchaser represents that by reason of its, or of its management's, business or financial experience, Purchaser has the capacity to protect its own interests in connection with the transactions contemplated in this Agreement. Further, Purchaser is aware of no publication of any advertisement in connection with the transactions contemplated in this Agreement.

(e) **Accredited Investor**. Purchaser represents that it is an accredited investor within the meaning of Regulation D under the Securities Act and as defined in the National Instrument 45-106 – *Prospectus and Registration Exemptions*, and has completed and submitted to the Company upon execution of this Agreement and as of the Closing Date an Accredited Investor Certificate in the form attached to this Agreement as Exhibit A and the Purchaser shall submit to the Company such further assurances of such status as may be reasonably requested by the Company. The Purchaser has furnished or made available any and all information requested by the Company or otherwise necessary to satisfy any applicable verification requirements as to "accredited investor" status. Any such information is true, correct, timely and complete. The Purchaser is not created or used solely to purchase or hold securities in reliance on the exemption for an "Accredited Investor".

(f) **Foreign Investors**. If Purchaser is not a United States person (as defined by Section 7701(a)(30) of the Internal Revenue Code of 1986, as amended) (a "***Foreign Purchaser***"), Purchaser has satisfied itself as to the full observance of the laws of its jurisdiction in connection with any invitation to subscribe for the Shares or any use of this Agreement, including (i) the legal requirements within its jurisdiction for the purchase of the Shares, (ii) any foreign exchange restrictions applicable to such purchase, (iii) any governmental or other consents that may need to be obtained, and (iv) the income tax and other tax consequences, if any, that may be relevant to the purchase, holding, redemption, sale or transfer of the Shares. Purchaser's subscription and payment for and continued beneficial ownership of the Shares, will not violate any applicable securities or other laws of Purchaser's jurisdiction.

(g) **Company Information**. Purchaser has received and read the Company's financial statements and has had an opportunity to discuss the Company's business, management and financial affairs with directors, officers and management of the Company and has had the opportunity to review the Company's operations and facilities. Purchaser has also had the opportunity to ask questions of the Company and its management regarding the terms and conditions of this investment, which questions were answered to its satisfaction. Purchaser believes that it has received all information Purchaser considers necessary or appropriate for deciding whether to purchase the Shares. Purchaser acknowledges that any business plans prepared by the Company have been, and continue to be, subject to change and that any projections included in such business plans or otherwise, while based on assumptions believed to be reasonable, are necessarily speculative in nature, and it can be expected that some or all of the assumptions underlying the projections will not materialize or will vary significantly from actual results. Purchaser also acknowledges that it is relying solely on its own counsel and not on the Company or its agents for legal advice with respect to this investment or the transactions contemplated by the Agreement.

(h) **Rule 144**. Purchaser acknowledges and agrees that the Shares are "restricted securities" as defined in Rule 144 promulgated under the Securities Act as in effect from time to time and must be held in accordance with the time periods specified therein unless they are subsequently registered under the Securities Act or an exemption from such registration is available. Purchaser has been advised or is aware of the provisions of Rule 144, which permits limited resale of securities purchased in a private placement subject to the satisfaction of certain conditions, which may include, among other things: the availability of certain current public information about the Company, the resale occurring following the required holding period under Rule 144 and the number of securities being sold during any three-month period not exceeding specified limitations. Purchaser acknowledges and understands that the Company may not be satisfying the current public information requirement of Rule 144 at the time Purchaser wishes to sell the Shares, and that, in such event, Purchaser may be precluded from selling such securities under Rule 144, until such requirements are satisfied or no longer applicable. Purchaser acknowledges that, in the event the applicable requirements of Rule 144 are not met, registration under the Securities Act or an exemption from registration will be required for any disposition of the Shares.

(i) **Disclosure of Certain Information as Required by law** The Purchaser understands that the Company may be required by law or otherwise to disclose to regulatory authorities the identity of and other information in relation to the Purchaser and agrees that such information may be provided by the Company if and as, in the discretion of the Company, such disclosure is required or desirable and this shall be deemed to be the consent or approval from the Purchaser to the Company for using, disclosing or in other manner dealing with such information under applicable privacy legislation

(j) **Residence**. The office or offices of Purchaser in which its investment decision was made is located at the address or addresses of Purchaser set forth on the signature page hereof.

3.3 **Transfer Restrictions**. Purchaser acknowledges and agrees that the Shares are subject to restrictions on transfer as set forth in the Investor Rights Agreement and in accordance with applicable securities laws.

3.4 **Legends**. Purchaser understands and agrees that the certificates evidencing the Shares, or any other securities issued in respect of the Shares upon any stock split, stock dividend, recapitalization, merger, consolidation or similar event, shall bear the following legend (in addition to any legend required by the Investor Rights Agreement and applicable federal, provincial, state or foreign securities laws):

"THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED OR QUALIFIED BY PROSPECTUS UNDER THE UNITED STATES SECURITIES ACT OF 1933, AS AMENDED (THE "US SECURITIES ACT") OR THE SECURITIES LAWS OF ANY PROVINCE OR TERRITORY OF CANADA OR ANY OTHER JURISDICTION. THE HOLDER HEREOF, BY PURCHASING SUCH SECURITIES AGREES FOR THE BENEFIT OF THE COMPANY THAT SUCH SECURITIES MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED IN THE UNITED STATES IN THE ABSENCE OF A REGISTRATION STATEMENT IN

EFFECT WITH RESPECT TO THE SECURITIES UNDER THE US SECURITIES ACT OR AN EXEMPTION FROM SUCH REQUIREMENT AS PROVIDED IN SUCH ACT. IN CANADA, UNLESS PERMITTED UNDER CANADIAN SECURITIES LEGISLATION, THE HOLDER OF THIS SECURITY MUST NOT TRADE THE SECURITY BEFORE THE DATE THAT IS 4 MONTHS AND A DAY AFTER THE LATER OF (I) [INSERT DISTRIBUTION DATE] AND (II) THE DATE THE COMPANY BECOMES A REPORTING ISSUER IN ANY PROVINCE OR TERRITORY OF CANADA. IN ANY OTHER JURISDICTION, THE SECURITIES REPRESENTED HEREBY ARE NOT TRADABLE OR TRANSFERABLE UNLESS IN COMPLIANCE WITH APPLICABLE LAWS, REGULATIONS, RULES AND POLICIES OR THE APPLICABLE JURISDICTIONS."

4. **CONDITIONS TO CLOSING IF THE PUT NOTICE IS GIVEN**.

4.1 **Conditions to Purchaser's Obligations at the Closing**. Purchaser's obligations to purchase the Shares at the Closing if the Put Notice is delivered by the Company to the Purchaser are subject to the satisfaction (or waiver by Purchaser), at or prior to the Closing Date, of the following conditions:

(a) **Representations and Warranties True; Performance of Obligations**. The representations and warranties made by the Company in Section 2 hereof shall be true and correct in all material respects as of the Closing Date, except in each case, for those representations and warranties that address matters only as of a particular date, which shall be true and correct in all material respects as of such date, and the Company shall have performed all obligations and conditions herein required to be performed or observed by it at or prior to the Closing.

(b) **Shareholder Approval**. The Company shall have procured the necessary shareholder approval to the extent required under the Canadian Business Corporations Act, the Articles, the Investor Rights Agreement, and any voting or other agreement among the shareholders and the Company for the approval of or consent to the transactions contemplated by this Agreement.

(c) **Legal Investment**. On the Closing Date, the sale and issuance of the Shares shall be legally permitted by all laws and regulations to which Purchaser and the Company are subject.

(d) **Consents, Permits, and Waivers**. The Company shall have obtained any and all consents, permits and waivers necessary or appropriate for consummation of the transactions contemplated by this Agreement except for such as may be properly obtained subsequent to the Closing.

(e) **Share Certificates**. The Company shall have executed a share certificate in favor of Purchaser representing the Shares purchased at the Closing containing the relevant legends as provided for in this Agreement.

(f) **Compliance Certificate**. The Company shall have delivered to Purchaser a Compliance Certificate, executed by the President of the Company, dated as of the Closing Date, to the effect that the conditions specified in subsections (a) and (b) of this Section 4.1 have been satisfied.

(g) **Secretary's Certificate**. At the Closing, Purchaser shall have received from the Company's Secretary a certificate having attached thereto (i) the Articles as in effect at the time of the Closing, (ii) the Company's By-laws as in effect at the time of the Closing, (iii) resolutions approved by the Board of Directors of the Company authorizing the transactions contemplated hereby, (iv) resolutions approved by the Company's shareholders in accordance with Section 4.1(b) above, (v) a certificate of compliance issued with respect to the Company issued by the Director of Corporations under the Canada Business Corporations Act and, if applicable, a completed Form D notifying the United Stated Securities and Exchange Commission of an exempt offering of securities pursuant to Regulation D promulgated under the Securities Act of 1933 or another applicable exemption and (vi) a good standing certificate issued with respect to the Company issued by the Registrar of Companies of British Columbia, with the certificates delivered pursuant to clauses (v) and (vi) each dated as of a recent date before the Closing Date.

4.2 **Conditions to Obligations of the Company**. The Company's obligation to issue and sell the Shares at the Closing if the Put Notice is delivered by the Company to the Purchaser is subject to the satisfaction (or waiver by the Company), on or prior to the Closing Date, of the following conditions:

(a) **Representations and Warranties True**. The representations and warranties in Section 3 made by Purchaser shall be true and correct in all material respects as of the Closing Date.

(b) **Performance of Obligations**. Purchaser shall have performed and complied with all agreements and conditions herein required to be performed or complied with by Purchaser on or before the Closing Date.

(c) **Consents, Permits, and Waivers**. The Company shall have obtained any and all consents, permits and waivers necessary or appropriate for consummation of the transactions contemplated by this Agreement.

5. **MISCELLANEOUS**.

5.1 **Governing Law**. This Agreement shall be governed by and construed under the laws of the Province of British Columbia, Canada in all respects as such laws are applied to agreements among British Columbia residents entered into and performed entirely within the Province of British Columbia, without giving effect to conflict of law principles thereof; provided however, it is acknowledged that the 1933 Act and state law concerning distribution or transfer of the Shares (or restrictions thereof) may apply if the Purchaser intends to transfer the Shares.

5.2 **Survival**. The representations, warranties, covenants and agreements made under this Agreement shall survive the closing of the transactions contemplated hereby for one year. All statements as to factual matters contained in any certificate or other instrument delivered by or on behalf of the Company pursuant hereto in connection with the transactions contemplated hereby shall be deemed to be representations and warranties by the Company hereunder solely as of the date of such certificate or instrument.

5.3 **Entire Agreement**. This Agreement, the exhibits and schedules hereto, the Articles, the Investor Rights Agreement and the other documents delivered pursuant hereto constitute the full and entire understanding and agreement between the parties with regard to the subjects hereof and thereof and no party shall be liable for or bound to any other in any manner by any oral or written representations, warranties, covenants and agreements except as specifically set forth herein and therein.

5.4 **Severability**. In the event one or more of the provisions of this Agreement should, for any reason, be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provisions of this Agreement, and this Agreement shall be construed as if such invalid, illegal or unenforceable provision had never been contained herein.

5.5 **Amendment and Waiver**. This Agreement may be amended or modified, and the obligations and rights of the Company and the Purchaser under this Agreement may be waived, only upon the written consent of the Company and Purchaser.

5.6 **No Assignment** This Agreement and the rights and obligations hereunder shall not be assigned by any party without the consent of the other, provided that if the Company undergoes a corporate reorganization, the Company shall have the right, without the consent of the Purchaser, to assign the right and benefit and the obligations and burden of this Agreement to its successor resulting from such corporate reorganization.

5.7 **Delays or Omissions**. It is agreed that no delay or omission to exercise any right, power or remedy accruing to any party, upon any breach, default or noncompliance by another party under this Agreement or the Investor Rights Agreement, shall impair any such right, power or remedy, nor shall it be construed to be a waiver of any such breach, default or noncompliance, or any acquiescence therein, or waiver of or acquiescence in any similar breach, default or noncompliance thereafter occurring. It is further agreed that any waiver, permit, consent or approval of any kind or character on any party's part of any breach, default or noncompliance under this Agreement or the Investor Rights Agreement or any waiver on such party's part of any provisions or conditions of this Agreement must be in writing and shall be effective only to the extent specifically set forth in such writing. All remedies, either under this Agreement, the Investor Rights Agreement, the Articles, the Company's By-laws, or otherwise afforded to any party, shall be cumulative and not alternative.

5.8 **Notices**. All notices required or permitted hereunder shall be in writing and shall be deemed effectively given: (a) upon personal delivery to the party to be notified, (b) when sent by confirmed electronic mail, telex or facsimile if sent during normal business hours of the recipient, if not, then on the next business day, (c) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (d) one (1) day after deposit with a nationally recognized overnight courier, specifying next day delivery, with written verification of receipt. All communications shall be sent to the Company and to Purchaser at the applicable address as set forth below or at such other address or electronic mail address as the Company or Purchaser may designate by five (5) days advance written notice to the other party hereto.

To the Company:

Xenon Pharmaceuticals Inc.
200 – 3650 Gilmore Way Burnaby, British Columbia V5G 4W8
Canada
Attention: President and CEO
Facsimile: (604) 484-3450
Email: spimstone@xenon-pharma.com

and to:

Xenon Pharmaceuticals Inc.
200 – 3650 Gilmore Way
Burnaby, British Columbia V5G 4W8
Canada
Attention: General Counsel
Facsimile: (604) 484-3450
Email: kcorraini@xenon-pharma.com

With copies to (which shall not constitute notice):

Wilson Sonsini Goodrich & Rosati, P.C.
650 Page Mill Road
Palo Alto, CA 94304
Attention: Jeffrey D. Saper and Troy Foster

Emails: jsaper@wsgr.com; tfoster@wsgr.com
Facsimile: (650) 493-6811

McCarthy Tetrault
Pacific Centre
P.O. Box 10424, Suite 1300
777 Dunsmuir Street
Vancouver, British Columbia
V7Y 1K2
Canada
Facsimile: 604-622-5628
Email: jlee@mccarthy.ca

To Investor:

Roche Finance Ltd
Attn: Carole Nuechterlein, Corporate Finance
Grenzacherstrasse 122
4070 Basel, Switzerland

With a simultaneous copy to:

Hoffmann-La Roche Inc.
Overlook at Great Notch
150 Clove Road
8th Floor
Little Falls, New Jersey 07424
Attn: General Counsel

5.9 **Expenses**. Each party shall pay all costs and expenses that it incurs with respect to the negotiation, execution, delivery and performance of this Agreement.

5.10 **Titles and Subtitles**. The titles of the sections and subsections of this Agreement are for convenience of reference only and are not to be considered in construing this Agreement.

5.11 **Counterparts**. This Agreement may be executed in any number of counterparts, each of which shall be an original, but all of which together shall constitute one instrument. Any or all parties may execute this Agreement by facsimile signature or scanned signature in PDF format and any such facsimile signature or scanned signature, if identified, legible and complete, shall be deemed an original signature and each of the parties is hereby authorized to rely thereon.

5.12 **Pronouns**. All pronouns contained herein, and any variations thereof, shall be deemed to refer to the masculine, feminine or neutral, singular or plural, as to the identity of the parties hereto may require.

[Signatory Page Follows]

IN WITNESS WHEREOF, the parties hereto have executed the COMMON SHARE PUT AGREEMENT as of the date set forth in the first paragraph hereof.

COMPANY:

XENON PHARMACEUTICALS INC.

Signature:	/s/ Simon Pimstone
Print Name:	Simon Pimstone
Title:	President & CEO

Address: 200 – 3650 Gilmore Way
Burnaby, British Columbia
V5G 4W8
Canada

PURCHASER:

ROCHE FINANCE LTD

Signature:	/s/ Carole Nuechterlein
Print Name:	Carole Nuechterlein
Title:	authorized signatory
Signature:	/s/ Andreas Kniergzinger
Print Name:	Andreas Kniergzinger
Title:	authorized signatory

Address: Roche Finance Ltd
Attn: Carole Nuechterlein, Corporate Finance
Grenzacherstrasse 122
4070 Basel, Switzerland
Facsimile: 011 41 61 687 0644

EXHIBIT A

ACCREDITED INVESTOR CERTIFICATE

THE PURCHASER IS AN ACCREDITED INVESTOR AS SUCH TERM IS DEFINED IN NATIONAL INSTRUMENT 45-106 PROSPECTUS AND REGISTRATION EXEMPTIONS, AS AT THE DATE OF THIS AGREEMENT AND AS OF CLOSING, BECAUSE IT/THEY FALL WITHIN ONE OR MORE OF THE CATEGORIES OF ACCREDITED INVESTOR SET OUT BELOW.

PLEASE WRITE YOUR INITIALS IN THE SPACE PROVIDED OPPOSITE EACH CATEGORY OF ACCREDITED INVESTOR THAT IS APPLICABLE TO YOU.

TERMS USED IN THE CATEGORIES OF ACCREDITED INVESTOR SET OUT BELOW ARE DEFINED IN NATIONAL INSTRUMENT 45-106 PROSPECTUS AND REGISTRATION EXEMPTIONS OR OTHER SECURITIES LAWS AND HAVE ALSO BEEN REPRODUCED BELOW. SHOULD YOU HAVE ANY QUESTIONS REGARDING THE COMPLETION OF THIS FORM, YOU ARE URGED TO CONSULT WITH YOUR LEGAL ADVISOR BEFORE DOING SO.

Accredited Investor (as defined in National Instrument 45-106 ("NI 45-106")) means:

(a) a Canadian financial institution, or a Schedule III bank;

Initial

(b) the Business Development Bank of Canada incorporated under the Business Development Bank of Canada Act (Canada);

Initial

(c) a subsidiary of any person referred to in paragraphs (a) or (b), if the person owns all of the voting securities of the subsidiary, except the voting securities required by law to be owned by directors of that subsidiary;

Initial

(d) a person registered under the securities legislation of a jurisdiction of Canada as an adviser or dealer other than a person registered solely as a limited market dealer under one or both of the Securities Act (Ontario) or the Securities Act (Newfoundland and Labrador);

Initial

(e) an individual registered or formerly registered under the securities legislation of a jurisdiction of Canada as a representative of a person referred to in paragraph (d);

Initial

(f) the Government of Canada or a jurisdiction of Canada, or any crown corporation, agency or wholly owned entity of the Government of Canada or a jurisdiction of Canada;

Initial

(g) a municipality, public board or commission in Canada and a metropolitan community, school board, the Comité de gestion de la taxe scolaire de l'île de Montréal or an intermunicipal management board in Québec;

Initial

(h) any national, federal, state, provincial, territorial or municipal government of or in any foreign jurisdiction, or any agency of that government;

Initial

(i) a pension fund that is regulated by either the Office of the Superintendent of Financial Institutions (Canada) or a pension commission or similar regulatory authority of a jurisdiction of Canada;

Initial

(j) an individual who, either alone or with a spouse, beneficially owns financial assets having an aggregate realizable value that before taxes, but net of any related liabilities, exceeds $1,000,000;

Initial

(k) an individual whose net income before taxes exceeded $200,000 in each of the two most recent calendar years or whose net income before taxes combined with that of a spouse exceeded $300,000 in each of the two most recent calendar years and who, in either case, reasonably expects to exceed that net income level in the current calendar year;

Initial

(Note: If individual accredited investors wish to purchase through wholly-owned holding companies or similar entities, such purchasing entities must qualify under paragraph (t) below, which must be initialed.)

(l) an individual who, either alone or with a spouse, has net assets of at least $5,000,000;

Initial

(m) a person, other than an individual or investment fund, that has net assets of at least $5,000,000 as shown on its most recently prepared financial statements;

Initial

(n) an investment fund that distributes or has distributed its securities only to

Initial

(i) a person that is or was an accredited investor at the time of the distribution, Subscriber/Beneficial Subscriber

(ii) a person that acquires or acquired securities in the circumstances referred to in sections 2.10 [Minimum amount investment], and 2.19 [Additional investment in investment funds] of NI 45 106, or

(iii) a person described in paragraph (i) or (ii) that acquires or acquired securities under section 2.18 [Investment fund reinvestment] of NI 45 106;

(o) an investment fund that distributes or has distributed securities under a prospectus in a jurisdiction of Canada for which the regulator or, in Québec, the securities regulatory authority, has issued a receipt;

Initial

(p) a trust company or trust corporation registered or authorized to carry on business under the Trust and Loan Companies Act (Canada) or under comparable legislation in a jurisdiction of Canada or a foreign jurisdiction, acting on behalf of a fully managed account managed by the trust company or trust corporation, as the case may be;

Initial

(q) a person acting on behalf of a fully managed account managed by that person, if that person

(i) is registered or authorized to carry on business as an adviser or the equivalent under the securities legislation of a jurisdiction of Canada or a foreign jurisdiction, and Initial

(ii) in Ontario, is purchasing a security that is not a security of an investment fund; Subscriber/Beneficial Subscriber

Initial

(r) a registered charity under the Income Tax Act (Canada) that, in regard to the trade, has obtained advice from an eligibility adviser or an adviser registered under the securities legislation of the jurisdiction of the registered charity to give advice on the securities being traded;

Initial

(s) an entity organized in a foreign jurisdiction that is analogous to any of the entities referred to in paragraphs (a) to (d) or paragraph (i) in form and function;

Initial

(t) a person in respect of which all of the owners of interests, direct, indirect or beneficial, except the voting securities required by law to be owned by directors, are persons that are accredited investors;

Initial

(u) an investment fund that is advised by a person registered as an adviser or a person that is exempt from registration as an adviser; or

Initial

(v) a person that is recognized or designated by the securities regulatory authority or, except in Ontario and Québec, the regulator as an accredited investor.

Initial

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INTERPRETIVE AIDS:

The following definitions relate to certain of the terms mentioned above:

(a) “eligibility adviser” means

(i) an investment dealer or equivalent category of registration, registered under the securities legislation of the jurisdiction of a purchaser and authorized to give advice with respect to the type of security being distributed, and

(ii) in Saskatchewan or Manitoba, also means a lawyer who is a practising member in good standing with a law society of a jurisdiction of Canada or a public accountant who is a member in good standing of an institute or association of chartered accountants, certified general accountants or management accountants in a jurisdiction of Canada provided that the lawyer or public accountant:

A. does not have a professional, business or personal relationship with the issuer, or any of its directors, senior officers, founders or control persons, and

B. has not acted for or been retained personally or otherwise as an employee, senior officer, director, associate or partner of a person or company that has acted for or been retained by the issuer or any of its directors, senior officers, founders or control persons within the previous year;

(b) “financial assets” means cash and securities, and in Ontario, also includes any contract of insurance or deposit or evidence thereof that is not a security for the purposes of the Securities Act (Ontario);

(c) “fully managed account” means an account of a client for which a person makes the investment decisions if that person has full discretion to trade in securities for the account without requiring the client’s express consent to a transaction;

(d) “related liabilities” means

(i) liabilities incurred or assumed for the purpose of financing the acquisition or ownership of financial assets, or

(ii) liabilities that are secured by financial assets.